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ROBERT ERNEST COWAN





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SOMNAMBULISM AND CRAMP,

BY

BARON REICHENBACH.

TRANSLATED FROM THE GERMAN

BY

JOHN S. HITTELL.



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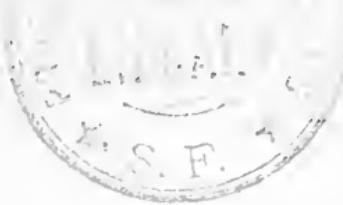
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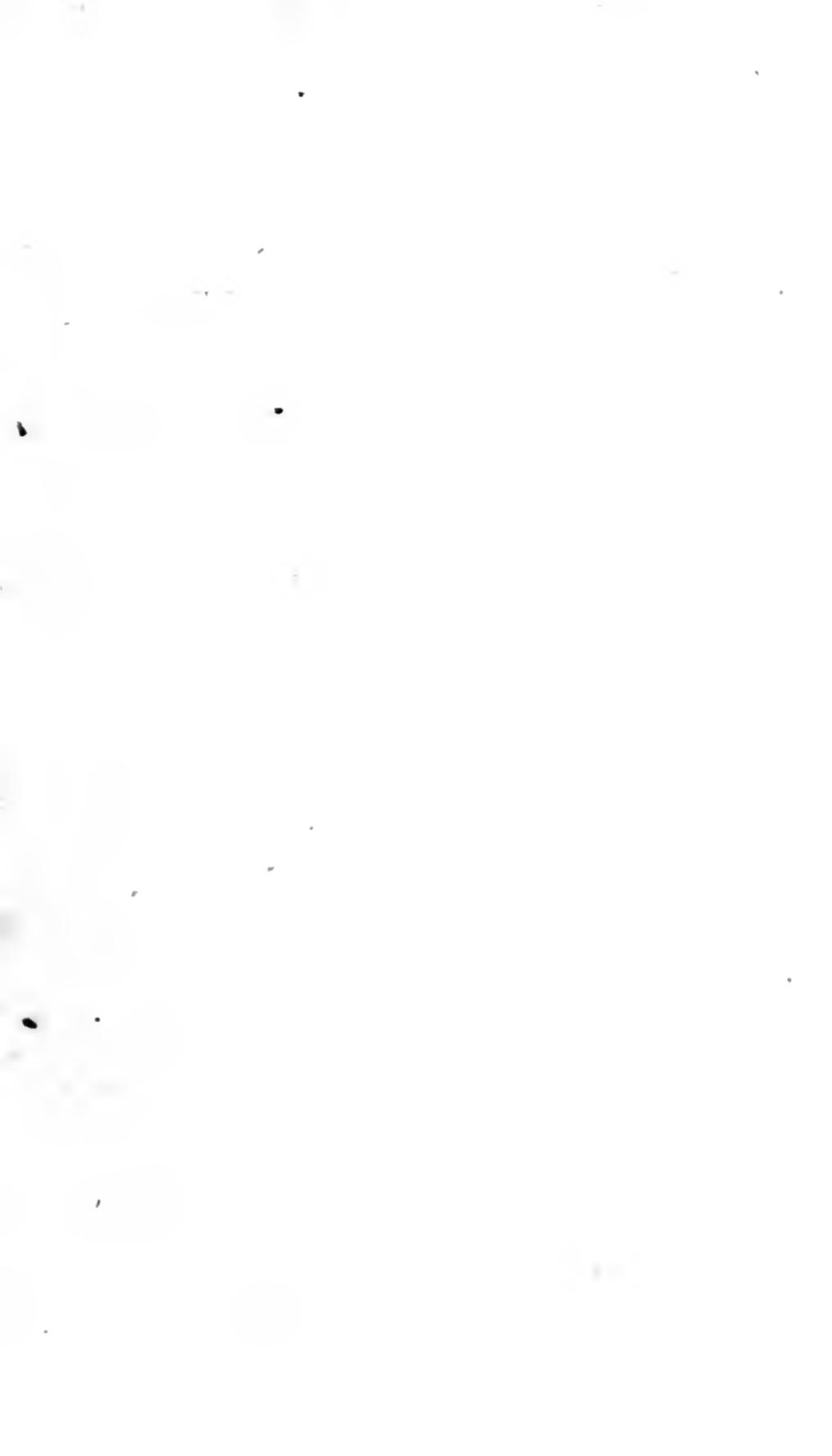
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TRANSLATOR'S INTRODUCTION.

THE following treatise, first published in the San Francisco Home Journal, and here given as a distinct book, was written by the Author, as portion of a very long work, of 1600 closely printed octavo pages, entitled : *Der sensitive Mensch und sein Verhalten zum Ode* (The sensitive Man and his relation to Od). This work is so large that I will not undertake to translate the whole of it, unless I receive some encouragement during the course of my labors, and for the purpose of inviting such encouragement and showing my ability to perform the labor, I now submit to the public a version of the chapters in "Somnambulism and Cramp," commencing in the German edition (Stuttgart and Tübingen 1855) at page 546 of the second Volume and ending at page 702 ; being about one tenth of the treatise on *The sensitive Man*. No part of this work has been published in English by any one save myself.

For the clear understanding of Reichenbach's remarks on Somnambulism and Cramp the reader should be familiar with his *Odic-Magnetic Letters*, which have heretofore been translated by me and published in English ; but for fear that those *Letters* may not be within the reader's reach at the time when he may wish to take up this book, I submit a brief abstract of the main principles set forth in them.

Od is a force in nature hitherto unknown. It is akin to the great natural forces of light, heat, electricity, magnetism, chemical affinity, etc. These were formerly called "imponderable substances;" but that name is now abandoned for the better and more correct one of "natural forces." Od pervades the whole universe, and radiates out from every particle of matter, but it is equally distributed. Wherever there is magnetism, heat, electricity, friction, motion, chemical action, or putrefaction, od is actively developed, or concentrated, and it may be perceived under favorable circumstances. It is a peculiarity of od, that not everybody can perceive it. Acute odic perception is comparatively rare ; its possession is called sensitiveness, or odic sensitiveness, and its possessors are styled sensitives. The marks of sensitiveness are numerous, but the main ones are natural somnambulism, and readiness to fall asleep under mesmeric influence. These are two infallible signs of high sensitiveness. Inability to sleep on the left side, dislike of yellow colors, fondness for blue, dislike of fatty diet, preference for slightly sour victuals, and discomfort in crowds, are other indications.

When od is actively developed, as by magnetism, it radiates out from the generator ; and a high sensitive can see the rays in the dark, but not in the light. The odic rays seen in the dark resemble a light smoke or a misty flame. Thus, if a high sensitive be confined in a perfectly dark room till his eyes have had time to accustom themselves to the darkness, and a horse-shoe magnet be then held, with its points upwards, before him, he will see a misty flame rising from each pole. He will see similar misty flames from the ends

of quartz crystals, from the ends of wires of which the other ends are rubbed, filed, heated, exposed to sunlight, connected with galvanic batteries, etc. The odic radiation may be felt as well as seen. If the sensitive put his hand near to the points of the magnet, crystal or wire, he will feel a sensation, as of a little breath, blowing against his hand ; and he will feel the same kind of a little breath from a human hand ; for (the human body, in which chemical action is constantly active, is a powerful generator of od.) The odic sensations may be perceived in other manners, by the other nerves, but we have not space here to explain these points fully.

Od, like magnetism, electricity and light, has two poles. The high sensitive looking carefully at the misty flames arising from the magnet, sees that the rays from the north pole are blueish, and from the south pole, yellowish. The point of a quartz crystal gives out a blue light, the base gives out reddish or yellowish rays. This distinction of colors is owing to the different odic poles ; the point of the crystal and the north pole of the magnet are od-negative ; the south pole of the magnet and the base of the crystal od-positive. (The human body has its odic poles also ; the right side is negative, the left, positive.) Like pairings, as the presentation of an od-positive pole of a strong od-generator to the positive left side of a high sensitive, produces unpleasant sensations, while an od-negative pole will cause an agreeable feeling. Thus the point of a quartz crystal, and the north pole of a magnet, and the right human hand, are all od-negative, and all cause a pleasant, coolish sensation when presented to the positive left hand of a sensitive, while

if they are presented to the negative right hand, they will cause a lukewarm disagreeable feeling. Everything that gives out a blueish odic light, is od-negative and cool to the left side of the sensitive, and lukewarm to the right side ; while everything giving out a reddish light is cool to the right and unpleasant to the left.)

Light has its own polarity of color ; blue at one end of the spectrum, red at the other ; and the od generated by light has its poles also ; the blue rays are od-negative, the red rays od-positive. When the positive and negative, red and blue odic rays meet as seen in the dark, they do not annihilate, or neutralize each other, but they unite and form a purplish flame.

There is an odic polarity in the chemical elements taken as a whole ; oxygen being the most strongly od-negative, and potassium the strongest od-positive. The stronger the affinity for oxygen, the stronger the odic positiveness. In this way the elements have been ranged in what is called the od-chemical order, which corresponds precisely with the electro-chemical order fixed after by long study, by Berzelius and other chemists.

Wherever there is putrefaction, there is odic radiation ; and Reichenbach supposes the vulgar belief that ghosts are seen in graveyards, to have arisen from the fact that high sensitives passing graveyards in very dark nights, saw the odic lights over new graves, where the bodies were putrefying. He also supposes that the alleged wonder of water-finding is caused by certain odic sensations felt by high sensitives when walking over subterranean currents of water ; the

flow of that liquid, like all other motion, serving to develop od.

He is not a sensitive himself, and he has not seen the odic lights or felt the odic sensations, of which he writes so much ; but he experimented for years with more than a hundred sensitives, testing and counter-testing their statements until he satisfied himself that there was no possibility of error about the facts as here stated.

It has been established by numerous mesmeric experiments that there is a force—sometimes called a “fluid”—unnamed until Reichenbach commenced his researches—a force which is generated in the human system, and by which one man can throw another into various mesmeric conditions, such as insensibility, somnambulism and cramp. It has been further established that there is some kind of a polarity on the two sides of the human frame, a polarity which was unexplained by our works on Chemistry and Physiology. These two principles—of the mesmeric force, as it was called before Reichenbach named it od, and the polarity of that force—though not very clearly set forth in the books on mesmerism, are yet clearly deducible from facts therein stated, and once admitted they almost compel us to receive Reichenbach's whole system, for he has connected all its parts so closely and strongly that the whole must stand or fall together.

I have thus very briefly stated the main points of the theory set forth in the *Odic-Magnetic Letters* ; and I now proceed to present here a similar abstract of the Treatise on *Somnambulism and Cramp*, so that

the reader, before commencing to read the body of the book, may have a general idea of its contents.

And first in regard to the phenomena of Somnambulism :—

Somnambulism is a peculiar abnormal mental fit, or temporary condition, wherein man loses his normal consciousness and gets another abnormal one, and becomes a different person, with a new memory, powers of perception, and modes of thought and action. Somnambulism is of two kinds, natural or spontaneous, and artificial or mesmeric. The former occurs unexpectedly and often away without having been discovered, the normal memory being ignorant of the occurrence of the sleep-waking fit, as well as the acts done in it. Somnambulism rarely occurs in a solitary fit, but having once made its appearance in a person, recurs again and again, and if the fits be short, they often recur at regular intervals, as a particular hour every day. The liability to somnambulism seems to be a physical affection ; it often comes on about the age of puberty, or during sickness, and disappears when the frame gets its full growth and the nerves are strengthened by exercise and health. It has been observed that the tendency to sleepwalking seems to be hereditary in certain families ; if one child in a house be a somnambulist, the others will be liable to the same affection. The fits of spontaneous somnambulism may occur at any time during sleep, or during normal waking, and if in the latter condition during labor, or conversation, while standing, sitting or walking. A person once subject to it is never secure from its attacks. The transition from normal walking to somnambulism and from the latter to the former state are often almost

instantaneous, and occur without any perceptible external causes. Mesmeric somnambulism is very much like the spontaneous, but is brought on intentionally by mesmeric treatment.

In somnambulism the senses are often dormant. The eyes are closed, and when the lids are forced open the iris is found to be turned upwards in a singular position. The retina seems to be insensible, for the pupil does not contract and enlarge in proportion to the strength of the light. The ear is ordinarily deaf. Loud, sudden and unexpected noises, such as the discharge of pistols at the ear do not cause the somnambulist to start. The nose does not seem to perceive the strongest pungent odors, such as that of ammonia. The nerves of touch convey no sense of pain. Pinching, pricking and cutting do not disturb or waken the somnambulist.

Although the nerves of sense appear to have lost their functions during somnambulism, yet the somnambulist is not without means of perception. He sees with his eyes closed, in darkness as well as in daylight. Sometimes he possesses a clairvoyant power, and sees and hears events occurring far from him in places hidden from him by numerous walls or buildings. He sees through opaque substances ; can read sealed letters, and look into his own body and the bodies of others ; can read their thoughts ; and can even foresee the fortune, particularly in regard to his own health.

The somnambulist remembers all the impressions made upon his mind while in somnambulism, and also those made during normal consciousness, and even those made in the latter state, but forgotten and entirely

beyond the reach of the waking memory. Thus cases have occurred of somnambulists in mature age speaking fluently in tongues which they had known in childhood, but afterwards, for want of practice, completely forgotten for a score of years. The somnambulist, when awake, does not remember the impressions made on his mind in sleepwaking, and therefore his memory in the abnormal, is much more comprehensive than in the normal state.

The condition of the mind in somnambulism varies greatly in different cases. Some sleepwalkers talk in an unconnected manner, as if insane or monomaniac ; but most act in a thoughtful manner, and speak more intelligently than when awake. They walk, read, work, talk, joke and laugh, like other persons. If alone, they talk to themselves ; if in company, they talk to others. Somnambulists are fond of getting out into the moonlight, and for that purpose will clamber out at night upon roofs, going in dangerous places, where they would never venture awake, and where the bravest men, accustomed to climb about on buildings, would dislike to follow. If opposition be made to the somnambulist going out upon the roof, the latter will sometimes insist, declare that there is no danger and go into a paroxysm of rage if prevented, or show supernatural strength in breaking down barriers, or breaking away from persons holding him. Some somnambulists do not seem to think much of dress, particularly when they have not been in that state often, and have not spent much time while somnambulic in company ; thus most sleepwalkers go out in their night gowns.

Where somnambulism is caused by mesmeric treat-

ment, the somnambulist is in communication with the mesmerizer, and hears him and sees him, while apparently not hearing or seeing any other person, no matter how many there may be in the room. He is, also, to a great extent, under the influence of the mesmerizer, and will act and form opinions in accordance with the directions of the latter in a strange manner. When the mesmerizer suggests an idea, the somnambulist's mind seems to be entirely occupied by it. Sometimes it happens that the spontaneous somnambulist gets into a mental communication with another person, and stands to him in the same relation as the mesmeric somnambulist to the mesmerizer. If the sleepwaker is not in communication with anybody, then accident seems to suggest certain ideas, which occupy his mind to a seeming extension of other impressions. It often happens that the ideas dominant in one fit are taken up again in the next one, and so on. Thus, a lady may commence knitting a purse while somnambulic, and work at it during a number of successive fits, putting it away carefully before awaking, always commencing methodically where the work was previously abandoned, and never knowing anything of it when awake.

The mind in somnambulism is ordinarily joyous and jocose in mood, the cares of everyday life being forgotten. The sleepwaker in society neglects many of the little customary conventional ceremonies, and is familiar, but keeps within the bounds of decency and propriety.

The somnambulist eats, drinks, and performs the ordinary duties of life very much as in normal consciousness. The mind is often as clear and quick in

somnambulism as in waking hours ; and of many somnambulists, it is said that they show more wit asleep than awake.

Such are the main features of somnambulism, as reported by a great number of writers. The phenomena are very different in different persons, scarcely any two cases being alike. The clairvoyant power and supernormal perception are looked upon as mere fictions by many physiologists, especially those who have never had an opportunity to observe this rare and wonderful abnormal condition.

Now for Reichenbach's explanations of the somnambulic phenomena.

In perfect health the human body is pervaded by od in a state of equilibrium. The person in whom that equilibrium is steady and not easily disturbed, is a non-sensitive ; he whose odic equilibrium is unsteady is a sensitive. Only sensitives are liable to somnambulism, which is a disturbed odic state, with negative od predominant. Somnambulism is caused only by od-negative influences, such as downward passes in the mesmeric style, by the odic radiation from the north pole of a magnet or the point of a quartz crystal ; and it is cured or prevented by od-positive influence, such as upward passes, the south point of the magnet, the base of a crystal, etc.

As somnambulism is the od-negative state of the nervous system, so cramp is the od-positive state ; the influences which cause the one will cure the other. Both states begin and end with odic nervous thrills, which, in the beginning of somnambulism and end of cramp, fall from the head to the feet, and at the end of somnambulic fits and beginning of cramps rise from

the feet to the head. The two opposite odic conditions often occur together : negative and positive od do not neutralize each other when they meet in the human body. High sensitive, often somnambulic, invariably suffer much with cramp.

Reichenbach, after giving a number of instances in which he has witnessed clairvoyances, gives a theory to explain that singular power. He says the whole nervous system of a high sensitive, perceives the odic rays, as the eye does the light rays ; and therefore, the clairvoyant can see, by the odic perception, almost as well without the use of the eyes as with them. As the odic rays have no insulator but pass through all substances, so everything is "diodanous," or permeable to the odic rays, and consequently translucent to the nerves of acute odic perception. Thus the high sensitive, under favorable condition, can see into and through the human body, and see the internal organs, and perceive whether they are sound or diseased.

Negative od predominates in sunlight, and positive od in moonlight, which latter is therefore the more agreeable to the somnambulist in the od negative state. The positive odic influence of the moonlight is not strong enough to wake the sleeper, but only to disturb and make him restless, and the result is that he gets up and goes out into the positive moonlight, and not content with that, he gets up as high as possible for the purpose of seeing the moonlight reflected from other objects in the vicinity. These are the causes why somnambulists are more uneasy when the moon is full than at any other time, and why they always get up on house-tops, &c.

I am not prepared to assert that all Reichenbach's

alleged discoveries are really true. They have not been subjected to all the tests. We know only that they come from a most learned and able man, whose previous eminence as a chemist and geologist and technicist, predisposes us in his favor, whose books on this subject of od, show us that he used all those tests, and made all those experiments which scientific scepticism could demand, and made them with the greatest care and recorded them with unexampled minuteness. We know that he is an aged man, already beyond three score and ten, with no imaginable motive to mislead. We know that his theory has none of the marks of having been adopted in folly or delusion ; he shows no preternatural wonders, comes with no message from the other world, endeavors to establish no new faith, asks no credulity, hopes for nothing but to extend the domain of science—a domain wherein the imposter and the dupe have nothing to gain and everything to lose.

Many alleged important scientific discoveries have proved false after thorough investigation. Some have been subjects of dispute for many years, between masters of the branches under which they came, as was the case with mesmerism and Laplace's theory of the formation of the universe—theories which have played a very important part in physiology and astronomy. So it may be with the odic theory. But it certainly is too strong on the very face of Reichenbach's books, it is supported and braced by too many universally known facts, it is connected too ingeniously (to say the least) with many well established principles of physics, it offers plausible explanations of too many hitherto inexplicable mysteries, it is set forth in works

of too much learning, ability and elegance to allow us to suppose that it should easily be overthrown. The more we consider it, the more reasonable does the theory appear.

Mesmerism, the power of certain men to throw certain other men into states of insensibility, somnambulism and cramp, by passes, etc., is now recognized as true by our highest physiological authority; and it follows as a matter of course that the passes must exert an influence by means of a force not explained, understood, or even named before it was called "od" by Reichenbach. I think it not only proved that there is such a force, different from all the other known forces of nature, but that it also has a polarity. At least, it is a well known fact to experienced mesmerists, that there is a polarity in the human frame, the right and left sides being in an unmistakeable polar opposition. When we once admit the two principles of the existence of the odic force in the human system, and the polarity of the force and of the human body, they almost compel us to receive Reichenbach's whole system, for he has connected all its parts so closely and strongly that the whole must stand or fall together.

Some new words used in the following translation may deserve explanation here.

Sensitiveness, *Sensitive* and *Non-Sensitive* are sufficiently explained by what has gone before. *High-sensitive*, *demi-sensitive* and *low-sensitive* are persons in whom odic sensitiveness is high, moderate or weak. *Od*, *od-negative*, and *od-positive* have been explained. *Olfy* means to charge with od. *Soretic* as an adjective applied to positive odic influences, exerted by upward passes &c. *Nemetic* applies to negative odic in-

fluences. *Soretically* and *nemetically* are their respective adverbs. *Pairing* is the presentation of two odic poles to each other. *Like pairing* is the presentation of like poles; *unlike pairing* the presentation of opposite poles. *A double pass* is a pass made with both hands; a *part pass* is a pass which is not made over the whole length of the body; a *full-length pass* is made over the whole length; a *far pass* is a pass made at a distance. *Diodanous* means permeable to od; *diodaneity* means permeability to od. *Psychology*, with its adjective and adverb, is used here in its wide modern sense of the science of mind.

J. S. H.

SAN FRANCISCO, September 19th 1859.



AUTHOR'S PREFACE.

THE AIM OF HIS INVESTIGATIONS.

DIFFERENT as the present investigations may be from all previous essays on the same subject, they yet have a similar origin, which, in my case, was the opportunity offered by accident of observing the highly sensitive Miss Nowotny suffering with catalepsy on the bed of sickness. The difference, in the method of investigation and the conclusions arrived at, may be accounted for by the fact that my predecessors were, almost without exception, physicians or medical dilettanti, while I am an investigator of nature. As might be expected from those upon their stand-point, their conceptions and studies of somnambulism were doctorish, aiming only at cures; while, on the other hand, I took the philosophic trail, and adopted as my purpose the study of the forces of universal nature here active. I have therefore not inquired what practical

benefit, of value for the treatment of future patients, might be derived from the singular pathological phenomena of Miss Nowotny, but I have labored to discover whether it might not be possible to reach the physical and physiological causes, whence proceeded a multitude of astonishing effects, such as I saw developed in cataleptic cases. The physicians, with an immediate utilitarian purpose in view, went forward with their study of somnambulism ; but I turned and went backwards, neglecting all minor matters in the search for the beginning of these efforts of nature. Thus it was that while those worried themselves with somnambulism, animal magnetism, fascination, and clairvoyance, and finally sought, by means of extacies and magnetic communication with the supernatural to throw light upon the dark labyrinth, in which they were ever becoming more hopelessly lost, I, taking the contrary course, went from magnetism to crystallization, thence to chemical analysis, and so on to sound, warmth, light and electricity, and finally to the source of all these enigmatic phenomena in the odic group. For the purpose of laying bare the foundations of the natural forces here ruling, I followed only the traces of their dynamics, and as may be seen in my previous writings, excluded from my investigations, the various entangled phenomena of sleep-waking. In now approaching somnambulism, under these circumstances, some justification of my conduct is necessary ; and this justification consists in the fact that I do not treat of somnambulism in its whole extent, and even give no consideration whatever to many of its dark sides which are converted by some late writers into its main features ; but I confine myself to those points of physio-

logy and psychology—considering the latter only as a natural and experimental science—which are necessary to the completeness and clearness of my physical labors; and which, therefore, I would not dare to omit. Nothing that I write here has been obtained from others; I shall restrict myself carefully to the results of my own investigations.

THE AUTHOR'S OPPORTUNITY TO STUDY SOMNAMBULISM.

On this occasion, those persons will be set at rest who erroneously supposed and asserted that I knew no somnambulists, and that I avoided mentioning somnambulic phenomena for want of information. Among my sensitive subjects there are some thirty and odd somnambulists with whom I have had intercourse for years. One of these remained in my house for two weeks, others for three or four weeks, Miss Reichel three months, and Miss Atzmannsdorfer for six months; and therefore I may claim to have an intimate acquaintance with the facts of sleep-waking, such as few physicians have had. Consequently, the assertion that I have no experience in the field of somnambulism is less applicable to me than to any one else, and can proceed only from physicians, in so far as I am not of their profession. But I must beg the reader to keep in mind that in this essay, the subject is not the curing of disease, but the investigation of nature. All true hygiene must have natural science as its foundation. And thus my investigations will render more and greater services to medicine than all the receipts for the most effective passes and the artfullest manipulations with palms and fingers.

I shall treat of somnambulism under its two phases,—physiological and psychological. That these two phases flow together in the somnambulic phenomena is easily to be understood; but the dividing line between them may nevertheless be accurately and securely traced.

PART I.

SOMNAMBULISM OF PHYSIOLOGICAL ORIGIN.

CHAPTER I.

GENERAL DEVELOPMENT OF SOMNAMBULISM.

§ 1. **The beginnings.**—When sensitiveness belongs in a high degree to the constitution of a man from his birth, or when it has been greatly increased by disease it is no longer content with influencing his waking life in a thousand ways, but lays hold also of his sleep, the normal and healthy course of which it changes to an abnormal and disturbed condition.

The first act, that of falling into the somnambulic sleep—an act which I have witnessed hundreds of times—does not differ perceptibly from the entrance into the ordinary sleep. In Miss Atzmannsdorfer I had frequent opportunities of observing sleepiness, yawning, evident resistance and struggle, in which her will was finally conquered, and then somnambulic sleep immediately followed. Ordinarily, however, Miss Reichel and Messrs. Sturmann, Winter and others, fell quickly from waking into somnambulism. I once advised Miss Zinkel not to wear a night-cap, which I thought unwholesome, and she accordingly commenced to take her cap off but stopped—she had gone into somnambulism.

§ 2. Speaking in dreams the first sign of somnambulism.—The first sign of abnormal action often discoverable in slightly sensitive persons, who are not aware of any unhealthy action in their constitutions ; is speaking in dreams. A perfectly non-sensitive man seldom or never speaks in dream. No one has ever heard me speak a word in dream, and I am a perfectly non-sensitive, but possessed, at the same time, of strong nervous sensibility. On the other hand, nearly every one of my sensitive subjects has informed me that he talks in his dreams ; and the few, who could not tell me this, had, as it happened, no information in regard to themselves on this point. They must, however, just as certainly have spoken in dreams as did the others. Some of the weakest sensitives may be mentioned as examples of dream-talkers, and among them are Dr. Friedrich, Dr. Diesing when a boy, Prof. Schabus, Chevalier Sidorowicz, Prof. Shroetter, Prof. Ragsky, Prof. Chevalier von Perger, Mr. Mauch, Mr. Kotschy, Baron Schindler, Col. Arroquia, Major Schwartzmann, Mr. Cevallos, Chevalier Siemianowski and Mr. Offenheim. All the high sensitives, without exception, are dream-talkers ; such as Misses Geraldini, Hek, Rupp, Schwarz, Bernazke, and Blahusch, Mrs. Mueller, Drs. Loew, Machold, and Natterer, Messrs. Richard, Schuler, Alois Zinkel, Klein, Leopolder, Schiller, Preinreich, and many others. They talk not only to themselves and to imaginary persons, but they also conduct conversations with persons actually present, to whom they speak and reply with readiness.

§ 3. Sitting up in bed, the second sign.—The next

phenomenon, in the development of somnambulism, is, that such persons sit up in their beds, and accompany their words with gesticulations. With this dream-moving, the somnambulic action begins. The dream-conceptions gain such a strength and clearness that they appear to the dreamer to be real, and govern his conduct. Stephen Kollar, Miss Karhan, Mrs. Fenzl and Mrs. Preinreich are examples. The eyes of the somnambulist on these occasions are closed, but they move in such a lively manner that they appear to be winking. I have often satisfied myself that there was no real winking, but that the lids were kept closed.

§ 4. The somnambulist gets out of bed and works.

—When the sensitives advance another degree in their somnambulism, they get out of bed, walk about and do all kinds of work, mechanical and intellectual, write letters, compositions and poetry. Many sensitives do such things when children, particularly boys at the age of puberty. Examples of such dream-workers are Mr. Cevallos, Dr. Diesing, Sebastian Zinkel, Drs. Friedrich, Max Krueger, Mr. Kotschy, Major Schwartzmann, Mr. Hochstetter, Mr. Kratochwila, Stephan Kollar, Mr. Schiller, Mr. Preinreich, Mr. Enter, Mr. Delhez, Baronet Siemianovski, Mr. Weiner, Mr. Steiger, Mr. Offenheim, Dr. Machold, Dr. Loew, Mr. Leopolder, Baron Schindler, Miss Matilda von Unckhrechtsberg, Mrs. von Varady, Mrs. Bauer, and Miss Dorfer. All these are healthy persons, and the most of them have not been given to sleep-walking since arriving at their majority.

§ 5. Somnambulism proper.—The next degree is that of somnambulism proper. There are certain conditions in the sleep of healthy sensitive persons, which should perhaps be reckoned as somnambulic. I witnessed one case which showed conclusively that moderate sensitives, considered by themselves and others to be very healthy, may fall into somnambulism under very peculiar circumstances. Miss Zinkel was one of a family of nine children, all of whom grew up to be strong men and vigorous women. Health and strength, large muscle and fine bone are hereditary in the family. Miss Zinkel herself may make every claim to good and durable health. And yet, she and her brothers and sisters are highly sensitive. This woman, who had never been in the somnambulic sleep in her life before, and had never even heard of it, sat down one evening in my presence, in good health, but somewhat tired with the labors and cares of the day. I took the light away for one or two minutes, into another room, and when I returned I was astonished to find her asleep.

§ 6. Familiarity in somnambulism.—She soon began to speak in an unusual tone of voice, and when I went near her, she began to speak to me, addressing me as, "Thou, Thou, Baron, I have something to say to thee." [This address has a meaning which English-speaking people cannot comprehend without a special explanation. "Thou" and "thee" are always used by Germans, as well as by Frenchmen and Spaniards, in addressing near relatives, intimate friends, while other persons are addressed as "You," or its equivalent, implying that the parties stand upon a relation of

formality and ceremony very different from the intimacy implied by the address "Thou." People coming from the Continent of Europe to England or the United States, find it very queer that children have to be treated to the formality of "You," and that the nearest intimacy will not enable them to use the "Thou," an endearing familiarity which they prized so much in their native lands. If a gentleman were to say "Thou," to a lady of his ordinary acquaintance, in Germany it would be considered an insult; much less would a lady venture to address a strange gentleman in that style. Miss Zinkel, in her normal condition, would not have thought of saying "Thou" to Baron Reichenbach, and more than ordinary courage would have been required to carry the thought into execution, after its conception. "Thou" was used in England three or four hundred years ago, as it is now in Continental Europe, and indeed it has not gone entirely out of use yet in some of the provinces.—
TRANS.]

§ 7. Somnambulic prophecy.—I saw that this was no ordinary sleep, but I was astonished to think that she was a somnambulist. She told me then, among other things, that she was afraid of the coming night, because at twelve o'clock she would have an attack of the tooth-ache, which would last an hour. I took note of these words, and waked her, after some time, with upward passes, but said nothing to her of what had occurred; and one reason for my silence was, that she has a great dislike for somnambulism, and is afraid that she may fall into that condition, which she would consider a great misfortune. [This statement of Rei-

chenbach that he was silent on account of Miss Zinkel's fear of somnambulism, does not accord very well with his assertion, made only a few lines previously, that she had never heard of that state. The discrepancy may be explained by supposing the author to be guilty of an anachronism. He may have attributed motives, which governed him subsequently, to an earlier time.—TRANS.] The next morning I inquired, with much curiosity, how she felt and how she had slept. She complained that her sleep had been disturbed. "And by what?" I asked. "By toothache," was the answer. "And when did it attack you?" Just at 12 o'clock." And how long did it last?" "A long hour; I heard the clock strike one before the pain ceased." She had not had toothache in a twelve month previous to this.

I did not tell her of the interest which I took in her replies. They furnished me the proof and the first example that *sensitive persons, in robust health, may fall into somnambulic sleep, and that so deeply that they may be able to make prophecies about their physical conditions, such as no human knowledge, no other human faculty, would ever be capable of making.*

Such cases happened repeatedly about that time, offering different phases. One evening *she went* into the somnambulic sleep while sitting upon the sofa, and then said she would have a severe attack of cramp, which would commence at three o'clock in the morning, and last an hour and a half. Nothing was said to her after she awoke of this prediction, in the desire not to pain her with unavailing apprehensions. But the cramp came at three o'clock, as foretold, and lasted till half-past four.

Mrs. Heintl, a young woman of a fine figure, offered another example. She is always in good health, and is in the full-bloom of her beauty. Nevertheless, it happens that she gets up in her bed, speaks, even cries and bawls, lights a candle, works, writes, opens the windows, sits upon the sills, with her legs hanging out, and, in short, is completely under the dominion of somnambulism, and exposes herself to all its dangers.

§ 8. A moonlight walk in a night-gown.—I found a third example in Mrs. Cecelia Bauer. She is a healthy, robust woman, and like Mrs. Heintl, was never ill in her life. While living with her parents, in Nussdorf, she often arose in the night and did all kinds of dangerous acts about the house. One winter's night, when there was snow upon the ground, she opened the house-door and went out into the street, bare-footed and dressed only in a night-gown. It so happened that a fire broke out in the village, soon after she went out; the alarm was given; and the sleeper was awakened by the uproar and jostling of the excited multitude. She found herself, dressed very scantily, in the midst of the crowd, with the bright moon overhead. There have been *pretended* somnambulists, who have slipped out of houses at night, but these would-be dreamers never go out in their night-gowns, on moon-light nights, nor bare-footed in the snow; nor do they wait, on an alarm of fire, till they are surrounded and jostled by the crowd. When Mrs. Bauer was seen by her relatives, or friends, in her somnambulism, she was led back to the house; but it often happened that she went out and returned unnoticed, and lay down quietly again in

her bed. The next morning she would know nothing of her adventures of the previous night, but the marks of her movements and actions would show that she had been up.

These are women ; but men have been observed to act in the same manner. Mr. Klein, who was always healthy, discovered often that he had arisen in his sleep, walked about, worked at different things, and then gone to bed again. Dr. Friedrich and Messrs. Delhez, Offenheim, and many others, also walked and worked in their sleep, when young.

§ 9. Somnambulism possible in robust health.—These somnambulists are all persons in perfect health who were never troubled by illness, and had the most robust constitutions imaginable. I shall again return to this portion of the subject, but shall say nothing more of it now than that I consider the scientific principle well-established, that *perfectly healthy sensitives, who at least consider themselves to be free from all disease, not only walk in their sleep, but fall into the deepest somnambulism.*

This principle being fixed, it will be proper to glance briefly at the cause of somnambulic sleep, as I have observed it in highly sensitive—that is diseased—persons and in moderate sensitives who had fallen into a temporary illness. Thereafter we shall return to the qualities of sleep-waking and from them go back to its causes.

§ 10. Premonitory symptoms. A great number of causes may induce Cramp and Catalepsy in sensitive impressionable persons. Somnambulism may be induced by the same causes, or it may be a consequence of Ca-

talepsy. This change does not occur gradually, but in a rapid, often in an instantaneous transition from consciousness to the state of sleep. The premonitory symptoms, were usually a general chilliness, sometimes even an icy coldness. These symptoms were noted in Misses Atzmannsdorfer, Beyer, Nowotny, Sturmann and Weigand. The chilliness is followed by a remarkable, irresistible disposition to yawn; which was invariably succeeded in a few minutes by somnambulism in Misses Atzmannsdorfer, Beyer and Kynast. A third symptom is a burning and watering of the eyes, which break out into a flood of tears if the subject endeavors to resist the somnambulic attack. These facts were noticed frequently in Misses Atzmannsdorfer, Beyer and Zinkel.

§ 11. Transition to somnambulism. — The actual transition to the somnambulic sleep occurs instantaneously. Miss Atzmannsdorfer while engaged with me in waking and sensible conversation often changed, without any perceptible break or stoppage in her language, to talking mere nonsense. I made similar observations on Misses Krueger, Beyer and Sturmann; they had fallen into somnambulism. This state had come upon them as if it had been induced by a mere turn of a screw governing the rudder in the brain. The eyes were then closed and the skin without sensation, but the sense of hearing was good. Misses Girtler, Seckendorf, Atzmannsdorfer, Beyer, Reichel, Krueger, Weigand, Blahusch, Kynast, Sturmann and Dorfer, Mrs. Lederer, Krebs, Kienesberger and many others always had their eyes closed while in somnambulism. I stuck pins into the hands of Misses Sturmann, Girtler,

Nowotny, Atzmannsdorfer, Beyer and Kynast, without shrinking or sense of pain on their part. These are all well known phenomena which I merely mention by the way, and do not purpose to examine further.

The use of "thou" in addressing others is a peculiar mark of the somnambulists; they use it in speaking to every one, whatever his rank may be, high or low. Often, when it is doubtful whether a sleep is normal or abnormal, this is one of the most trustworthy means of determining.

§ 12. Difference between sleep and somnambulism.— The chief difference between the somnambulic and the normal sleeper, is that the latter has no clear consciousness, or is entirely unconscious, while the former is more or less conscious of his own existence and of what is going on about him; and this consciousness is sometimes so lively that it is scarcely to be distinguished from that of a waking person. Miss Reichel, while somnambulic in my house for weeks at a stretch, did not the less perform, as well as others, all the ordinary processes of life, and she worked industriously at her sewing with closed eyes for day after day. She walked safely through the crowded streets of Vienna with closed eyes, and made her purchases in the shops. Misses Seckendorf and Girtler, with closed eyes, observed all the rules of conventional propriety; the latter took particular care of her head-dress, and picking up an almanac, looked for certain days in it with her eyes shut, and when she had found them, pointed them out with her finger. I saw her pick up a pin from the table-cloth and put it in a proper place. A glass of water had been brought and placed in silence on the

table-cloth before her ; she reached out her hand with confidence, laid hold of the glass at once and drank its contents. I often conversed with Miss Atzmannsdorfer for hours, when she was somnambulie, about her past life, her prospects for the future, and other matters then interesting to her. Mrs. Lederer was lively and witty when in somnambulism, and laughed and joked about herself and others. Many of the girls liked to have love made to them, and were particularly pleased with flattery. Half Vienna remembers the somnambulist brewer boy, Simmering, who, with closed eyes, harnessed up his horses, got into his wagon and drove through the city, managing his horses judiciously. In short the somnambulists have such clear consciousness, and such good humor, are so lively and talkative, particularly when they have become experienced in that condition, that a strange observer, coming in accidentally, can not distinguish their condition and conduct from that of waking persons, except by the closed eyes

§ 13. Awakening from somnambulism.—If the somnambulists are left to themselves they remain in that condition for half an hour, a day or a night, and then awake to their ordinary consciousness. But sometimes they sleep-wake on for weeks and months; and indeed, one case in Vienna came to my knowledge where the somnambulist did not wake for half a year. The awakening usually occurs in a short time, and the entrance into every-day life appears rather dull. Miss Krueger, when awakening, rubbed her eyes slowly, looked round staringly, did not at first see clearly, and then wondered at the darkness and murkiness of the actual, world as compared with the joyous, care-

free dream-life from which she had just returned. Misses Reichel, Atzmannsdorfer, and others, acted in the same manner. Mrs. Lederer, in awakening, rubbed her eyes for a long time, and stared wondering at everything about her until she had finally come to herself. When Miss Zinkel was about to awaken, she began to rub her eyes, and I observed that this rubbing began at the inner corner of the eye and extended out to the temple. As this is a nemetic pass towards the facial nerves, so the rubbing was not merely accidental, but was a self-awakening by back passes. On one occasion she joined the five fingers of each hand together in a point, and without touching her eyes made a slow pass from the inner corners of the eyes to the temples. Indeed she once seized my hand, placed the points of my fingers together, and then used them to make similar passes over her eyes. If I had undertaken to awaken her, with all care and forethought, in this manner, I could not have done it in a more methodical and regular manner than this, at that time, new and inexperienced somnambulist did. The awakening which followed was at first unclear, as is the case with all somnambulists. She opened her eye-lids, but apparently did not see. I made all kinds of quick motions towards the eyes, but they were not noticed ; there was no shrinking or winking ; the pupil did not move. After the eyes were opened, a full minute of somnambulism intervened, before she arrived at the clear waking consciousness and sensation which succeeded. When I made another violent motion towards the eyes, she drew back in fright. The ordinary consciousness always began with astonishment and wonder at the circumstances, in which she found herself.

Miss Dorfer, and most of my other somnambulists, on awakening, are startled when they look round, and are frequently much surprised at seeing the company about them. Unless they have been subjected to tiresome experiments while asleep, they feel refreshed, and go about their work with a lively spirit. Miss Krueger praised the somnambulic sleep as a pleasure, invariably refreshing and strengthening. Mrs. Kienesberger represented it as comparable to a recovery from sickness. Miss Atzmannsdorfer always felt active and light-hearted after a somnambulic sleep. Miss Beyer spoke highly of the refreshment which she felt after sleeping in my quiet house, and the strengthening which such undisturbed sleep brought to her. All the somnambulists spoke in like manner, unless some peculiar illness oppressed them.

Such is a brief sketch of the ordinary course of somnambulism. We will now examine some of its peculiarities in detail.



CHAPTER II.

EXTERNAL CAUSES OF SOMNAMBULISM.

§ 14. Sensitiveness necessary.—The internal cause of somnambulism is as yet unknown to us. It appears from my investigation that all persons capable of going into somnambulism, possess the quality of sensitiveness. All persons, without exception, whom I have seen in somnambulic sleep were highly sensitive. A somnambulist will never be found wanting in sensitive impressibility. *Sensitiveness is a necessary precondition to somnambulism.*

Although we know of no physiological causal connection between sensitiveness and somnambulism, and know none of the internal causes of the latter state, yet we know many of its external inducements, and of the excitements which bring it on. In studying these we shall gradually approach the internal course of these wonderful phenomena, and perhaps we may, at some day, unveil them. But in these investigations we must be careful to stand fast by the facts—by the scientific facts—and trust to nothing else—to no suppositions or imaginations, no matter how closely they may appear to be related to established principles. But *all* the facts must be kept in view. The laws of logical reasoning must be closely observed. Here it is particularly that the physicians have committed

their errors in regard to somnambulism, and have done indescribable evil to science. The cause of their error is easily to be understood. Their professional action is governed by probabilities, often by mere suppositions. The diagnosis of most diseases is a mere matter of probability from first to last ; the wisest physician guesses well ; the others as well as they can ; and in numberless cases even the wisest can do no more than guess at the disease and the best probable remedy. In this manner the physician is accustomed to supposition and guess work. His whole scientific education, his whole method of recognizing fact in natural philosophy, and his modes of reasoning are trained in this path. Thus we often see imaginative physicians, governed by a lively habit of associating ideas, and more fitted to be poets than doctors, losing themselves in the most adventurous combinations of the powers of nature. And where could they find a more luxuriant field for a tumbling-ground, than that of the darkly attractive somnambulism ? There they tie together the undermost and the uppermost ; there they mix in genial union what should remain miles apart. The more singular the juxtaposition of the most inconsistent phenomena, the greater is the admiration of the multitude. By such methods the study of somnambulism has fallen into the deepest disgrace with sober science, and at last she has turned her eyes away from it entirely. For this result, somnambulism itself is not at all to blame, but only the illogical, the unscientific, the completely false method in which it has been handled by many physicians from the time of Mesmer to the present day. And when feeling, faith, religion and the spirit-world were mixed up with the question, what hope was

there for success in philosophic investigation? Faith and knowledge cannot exist together. The former rests upon authority and natural disposition, the latter upon facts and evidence. Evidence fails where faith is necessary; and where there is no evidence there is no knowledge. Science recognizes no proposition as true until it has been established by proof, and is sternly hostile to every thing else. Where demonstrative evidence is impossible there must at least be a strongly supported induction. This principle dare not be neglected in natural science, and least of all in the regard to somnambulism; and I shall observe it strictly in this investigation.

§ 15. Coolness favorable.—A cool temperature is as favorable to somnambulism as it is to ordinary sleep. Misses Atzmannsdorfer, Beyer, Zinkel, Reichel, Krueger and others, when restless from warmth, soon fell into somnambulism if they became cool.

Such coolness might be caused by the wind. South winds, and still more west winds hinder somnambulic sleep; north winds and cool east winds induce it. When Misses Atzmannsdorfer, Reichel, and Mrs. Kienesberger went from my country-house into the park, they were often afraid of becoming somnambulic under the influence of the east wind, and sometimes did fall into that state.

Rain has a similar influence, particularly when it occurs in hot weather. Many sensitives fall into long fits of somnambulism when a cold rain comes on. Storms in the heat of summer always dispose sensitives towards somnambulism.

§ 16. Somnambulism caused by negative od.—The influence of negative od from all substances is favorable to sleep upon all high sensitives. Miss Blahusch one evening, in the dark chamber, fell every moment into irresistible sleepiness ; and it was found that there were a number of large crystals lying near, the negative poles being towards her. I turned them about and the attacks of somnambulism ceased. Magnets had the same effect. The northward pole invariably caused somnambulism, and particularly in Misses Nowotny, Sturmann, Blahusch, Dorfer, Weigand, Reichel, Atzmannsdorfer and Beyer. I placed a magnetic wand, as tall as a man, near the left side of Miss Beyer, she standing up and holding it in her hand, with the northward pole near her head ; and in less than half a minute she was in somnambulism. When Miss Atzmannsdorfer could not sleep at night, it was her custom to get this wand and take it to bed with her. She knew from experience that when it lay at her left side, with the northward pole towards her head, she would soon go to sleep. But then she continued to sleep so long as the wand lay at her side. It has happened that she has gone to sleep with it in the evening, and on going to see her the next afternoon at three o'clock, I have found her still in the somnambulic sleep, and could not awaken her until I had the wand out of bed. But the wand in these cases reached only to the eyes and where the nerve of the forehead leading backward lies beneath the skin ; otherwise the influence was hostile to sleep, as may be easily understood. I tried similar experiments with Miss Krueger, and she also was somnambulic. Lady Elise von Seckendorf laid both hands

on the unlike poles of a five-leaved horse-shoe magnet, and in a few seconds she had fallen into somnambulism which lasted an hour. If I placed magnets, in unlike pairings, under the feet of Miss Atzmannsdorfer while she was in somnambulic sleep, she continued to sleep till the magnets were removed. The same lady stood once near the northern end of an iron wire, thirty feet long, stretched in the direction of the meridian, and took hold of it in her left hand, she was so oppressed by somnambulic sleepiness that I was compelled to place her at the southern end of the wire, to avoid being disturbed in my experiments ; and there she remained wide awake. I could mention facts of this kind by the hundred, for in daily intercourse with highly sensitive persons they were constantly recurring, and at last I took no more note of them.

All these cases prove that *the magnetic poles, particularly the northward pole in its unlike influence upon the left side of the high sensitive, induce somnambulism easily and quickly.*

§ 17. By electricity.—In like manner electricity is an excellent means of causing somnambulic sleep ; that is positive electricity which throws the person into the negative state. Miss Atzmannsdorfer felt the electrical current streaming from points like a cool breeze, and at once it made her drowsy. On another occasion, when I turned currents towards her from positively electrified points, she felt them as a very cold wind, and this across the room. The influence was so soporific that she went asleep every minute during my investigation, and I had to awaken her repeatedly. The same results were observed in experiments with Miss

Reichel and other sensitives ; and the tendency of positive electricity to produce somnambulism was shown on every trial.

§ 18. By organic substances.—All organic substances have somniferous influence upon sensitives disposed to somnambulism. I shall first mention some plants. When Miss Atzmannsdorfer was in her most sensitive condition, she found nothing more cool and agreeable than to approach a solitary tree, with dense foliage, standing alone in a meadow. But scarcely would she yield to her desire to lie down in its shadow, before she would fall into somnambulism. Often when she went out walking in the wood about my residence, she would be absent so long as to cause anxiety for her ; and on these occasions she had always fallen into somnambulism under some tree, and remained there for hours in her dreams. It was the same with Miss Reichel and Mrs. Kienesberger. But this influence continued only so long as the trees were in full leaf, and disappeared as the leaves fell in the autumn. Consequently, the influence was owing to the emission of od under the heightened organic activity ; and more particularly to the negative outpouring of the *Caudex ascendens* through leaves and buds.

§ 19. By plants.—Plants differ in their somniferous influence. All my somnambulists assured me that the rose was the best of soporifics ; and not only the flowers, the leaves of which they made into salad and ate, but also the bushes were described as having this quality, by Miss Atzmannsdorfer, Reichel, Beyer, Leopold-der, and Mrs. Kienesberger. I paid little attention to

these assertions, and ascribed them to general love of roses. It was only when Miss Beyer told me that, next to the roses, she considered the blossoms of the pear and apple-trees to be the greatest vegetable soporifics, and very similar in their influence to the roses, and when Miss Zinkel confirmed the statements of Miss Beyer, that I began to attach importance to this idea. The *pomaceas* [apple kind], and the *rosaceas* [rose kind], are near akin, and belong to the same class of *rosifloras*. Nature has distinguished these group of plants from others,—the roots of the *Pomaceas*, for instance, containing the peculiar substance known as *phlorhizine*,—and has given them a singular somniferous influence upon the keen excitability of high-sensitives. Chemistry will, in time, explain the singularity. My successors, in these investigations, will examine many other plants, with the aid of high-sensitives, and their labor will be of the greatest value to physiology, chemistry and therapeutics.

§ 20. **By human od.**—The out-streamings of human od, in their different degrees, have a strong influence on the somnambulic condition. On the 31st July, 1845, I arrived at home after a long journey, and found Miss Atzmannsdorfer in so highly sensitive a state that she fell into somnambulism every day. I went into the room where she was and spoke to her, and, within two or three minutes, she felt cool and fell into somnambulic sleep. The near approach of others—of my son, my daughter, the servants in the house, or any one else—had the same effect upon her. The near proximity of any one for several minutes, brought on the sleep. This extreme sensitiveness continued for

ten or twelve days, at the end of which time it moderated, and she could remain awake for some time, with others at her side. If I wished to speak with her in a waking condition during that period, I had to keep the whole width of the room between us, and even that precaution did not help much. When she had once fallen asleep, she could not awake so long as I was near her. My departure was always soon followed by her awakening. If she had slept long previous to my approach and was about to wake up, her sleep gained new strength from my presence, and continued until I went away, soon after which it ceased. When other persons spoke with her during sleep, her awakening was delayed as long as the conversation lasted. Thus it was in July and August; in November her sensitiveness to the cooling influence of my odic atmosphere had decreased but little, and she could seldom be near me ten minutes without falling asleep. Mrs. Lederer was sensitive to a like degree. The presence of her physician for five minutes was sufficient to cast her into somnambulism. If I sat down near to Miss Kynast, to converse with her in the dark chamber, the somnambulic influence was soon irresistible. The same was the case with Miss Blahusch, except that I always arrested the influence by backward passes. Miss Krueger lay down squarely upon a sofa, I lay down at her side, my right near to her left. She soon felt the somnambulic influence and she had scarcely expressed her apprehension of its approach before she was asleep. Miss Weigand continued stubbornly in somnambulism so long as men stood near her, and even if the time had come when she usually woke up. Miss Dorfer said she felt cool while I was experimenting

with her, and then in the midst of the work she addressed me as "Thou," and I saw that she had gone over into somnambulism. Miss Zinkel, in her impresible periods had to keep away from me, if she did not wish to fall into an irresistible and speedy sleep. When she was lively and active, and came near me, with her left towards my right side, she soon began to feel cool, her arms were covered with goose flesh, her eyes watered, she began to yawn, and if she did not then flee at once, she was asleep in a few seconds. Miss Beyer in one of her most impresible periods, came to me and I was arranging some papers, so that I might go to work with her, but before I had done, she was asleep; my right side during this time being towards her front. The presence of her physician, Dr. Blass, had the same influence upon her; fifteen minutes was enough to throw her into sleep, even when he remained at some distance from her. She could rarely remain awake more than half an hour when working with me. When she fell asleep on such occasions I left her for an hour, or she walked about the room for a while until I awakened her with backward passes. I could then work on with her for another half hour, at the end of which time the same ceremony was repeated. When the influence was strong upon her, she felt a coolness which changed to cold and shivering.

These examples are sufficient to show that high sensitives are strongly impressed, then made drowsy, and finally thrown into somnambulism by the approach of others. (And since a cool sensation accompanies the influence, the latter must be od-negative, accumulative, preceding and inducing sleep.)

§ 21. Fingers under toes.—One of the strongest soporifics I found to consist in placing the fingers of my right hand diagonally under the toes of the left foot. I tried Miss Zinkel in this manner, and in less than a minute she felt a coolness, her eyes watered, she yawned against her will while excited in thinking about other subjects than somnambulism, and she felt the near approach of sleep. I had to remove my fingers to prevent it from taking possession of her. On another occasion I took hold of her toes with my unlike hands, and almost immediately she was in somnambulism. When I did the same to Miss Atzmannsdorfer, she lying in bed, she felt an agreeably cool sensation, and in little more than a minute she had made the transition from ordinary consciousness into somnambulic dream. The transition was still more speedy with Miss Beyer. I had only to place my fingers under her toes as she sat in her chair, and in a moment she shivered and slept. In her sensitive periods I could do the same with her hands. If I laid the fingers of my right hand crosswise, pointing outwards in her left hand, she soon went to sleep, but many minutes were required. The coolness, yawning and drowsiness occupied some time before sleep occurred; whereas with the hands under the toes the sleep followed almost immediately. When Mrs. Anschütz lay in bed holding in her left the right hand of her husband, she soon fell into somnambulism. The influence from the hand went up to the head through the brachial plexus, and from the foot through the whole spinal marrow, wherefore the latter method was the more powerful.

§ 22. By blowing.—Blowing, particularly upon the head, is a very ancient means of producing sleep ; and the magnetic physicians use it without understanding the nature of its operation. Its influence may now be easily understood. As in all other processes of chemical decomposition, respiration is accompanied by a development of negative od which is carried off by the breath ; and this again must have a cooling influence on the positive portions of the human frame, and hence its soporific power. Miss Zinkel found blowing to be cool and agreeable only on the left side of her head ; on the right it was warm and disagreeable. This fact accords precisely with the od-negative character of the breath. But the sensation of coolness was so predominant in the head that the warmth on the right was not noticed until I inquired particularly about it. Misses Atzmannsdorfer, Reichel and Krueger immediately felt the soporific power of the breath, and the last remained asleep so long as I breathed upon the corner of her head. Thus waking and sleep, fact and fancy, truth and wild imaginings were separated only by a breath !

§ 23. By the glance.—According to the assertion of my somnambulists there is a strong soporific power in the glance. Miss Girtler, when awake, carefully avoided the eye of her physician, because she knew from experience that the meeting of their glances would cause her to fall into somnambulism. Mrs. Le-derer was also afraid of the eyes of her physician for the same reason. When Miss Beyer is in her most excitable condition, a sharp glance by her physician, into her eye, will throw her into sleep at once. I shall

not now consider the question whether this be the immediate influence of the glance, but shall only remind the reader that, according to my investigations, the eye is one of the least od-luminous portions of the body.

Somnambulism may be induced by human od, applied through conductors. I placed a wooden staff in the right hand of Dr. Horst, of Vienna, and Mrs. Lederer was thrown into sleep by the touch of the stick upon her left hand. Before going to sleep she described the feeling produced by the stick as cool and agreeable.

§ 24. By passes.—Passes are the most powerful means of producing somnambulism in sensitives. This is a well-known fact, and I shall restrict myself here to the enumeration of some of the most interesting vouchers. In trying some experiments not connected with somnambulism, I made some passes over Miss Kynast, from the head to the abdomen, and she immediately lost her consciousness in sleep. Two or three passes would at any time throw Mrs. Lederer into sleep. While Miss Beyer was sitting on the sofa, and I was six feet distant, I made two or three passes, and she was asleep. I thought I would try an experiment with farpasses on Mrs. Kowats. There were three rooms between us, and she was made so drowsy by my motions that I was compelled to stop. Miss Martha Leopolder was with Mrs. Kowats, and barely managed to keep awake. I made several passes over the head of Miss Zinkel, who at that time had never been somnambulic, and she complained of giddiness. She sat down, and I made several passes over her body, in the hope of driving off the giddiness, which I supposed to be owing to an accumulation of od. Scarcely had I done

so, when she fell into somnambulism, for the first time in her life. Whenever I made any downward passes over her, she felt the premonitory symptoms of somnambulism, coolness, watering of the eyes, yawning and drowsiness ; but to avoid throwing her into complete sleep, I generally stopped when she became drowsy. It is clearly to be seen that a sensitive person who has never been somnambulic, may easily be led over into that state. Lady [*Freifräulein*] Elise von Seekendorf became somnambulic when I made one pass over her right hand with my right, or with a crystal of gypsum. The dispersive influence of downward passes, made even with substances of a like odic pole, had the same effect. The second pass with the same crystal over Miss Weigand's right hand threw her into somnambulism, and another pass brought on cramps. At certain-times Miss Beyer would fall asleep after a single unlike downward pass made over her toes. I found Miss Reichel once in somnambulism, and after conversing with her for half an hour, was about to go away, when she requested me to make some downward passes over her, so that she might sleep more soundly after I should go. At the eighth pass she said it was enough. Thus it happened in unnumbered cases, that more or fewer *downward passes produced all the characteristic symptoms of somnambulism in sensitive persons; but never did I succeed in having the same influence upon non-sensitives; and according to my experience none but the sensitives can be thrown into somnambulism by art.*

§ 25. **By sunshine, &c.**—Sunshine which enlivens and refreshes all the rest of nature, has a tendency to

induce somnambulism. Miss Reichel complained of a similar tendency on her system. Miss Sturmann and others made similar remarks. But the influence of the sun's rays, like their odic nature, is compound, and it differs according to circumstances.

There are a number of other substances which may induce somnambulism. Though Frederick Weidlich liked the taste of bitter almonds, yet on the other hand he had a great dislike to them, because he had learned by experience that they had a tendency to throw him into somnambulism. Chloroform in water had a cooling and soporific effect on Miss Beyer. On one occasion, while in somnambulism, such a mixture was held under her nose, she expressed pleasure at smelling it, said it was cooling and would make her sleep more soundly ; thus having the same influence upon her as downward passes had upon Miss Reichel. A vial of chloroform placed in Miss Beyer's hand, caused a strong sensation of cold, and in some minutes brought on sleep. Water, strongly od-negative, is the strongest soporific substance known to me. When Misses Weigand, Sturmann and others drank a tumblerful of such water they went off at once into somnambulism. Miss Sturmann would sink down unconscious before drinking half the contents of the tumbler ; those about her had to take care that the glass did not fall and spill the water over her dress. I was the daily witness of such cases.

§ 26. Summary.—If we take in at one glance all the circumstances under which somnambulism begins, we may discover some general characteristics which mark all its action.

First, a cool temperature favors it, as do the north and east winds, rainy weather and the outbreak of storms in the hot seasons. The effect of this coolness will be understood, when we remember that the od-negative poles of crystals, the northward poles of magnets, the electric currents in the air, all which favor and induce somnambulism, cause a sensation of coolness to the sensitive. These agencies all have a cooling influence on the left side of sensitives. All are unlike to the left side, and unlikeness always produced the agreeably cool feeling, but particularly under strong od-negative influence. This is the case with sunshine, which though of a mixed character, is yet predominantly od-negative ; also with chloroform, a cool, strongly od-negative liquid, and finally also with water charged with negative od. The influence of vegetables and animals upon sensitives is of the same nature. A tree and wood, in full leaf, breathe out a strong atmosphere of negative od. The approach of human beings always has a cooling influence on sensitives ; and the cause of this is that persons facing each other in ordinary positions, bring the unlike poles opposite to each other. A similar influence was excited when I placed the fingers of my right hand under the left toes of a sensitive, or when I blew my od-negative breath upon her head, or when her left hand was touched by a staff held in the right hand of another person. But the mightiest agent in producing somnambulism, the downward pass, includes all these in itself—whether made with magnets, crystals, or hands. In every case its influence was cool and nemic—weak when made by presenting like to like, and in full power when like was passed over unlike from the

centre to the extremities. And now we have arrived at that important principle, drawn from an extensive experience,—*somnambulism is caused in sensitives by nemetic influences, and particularly by unlike and od-negative agents.* We shall find occasion hereafter to look farther into the conditions under which somnambulism is produced.

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CHAPTER III.

EXTERNAL INFLUENCES WHICH DISTURB SOMNAMBULIC SLEEP.

§ 27. **How to prevent somnambulism.**— We shall put the principle announced in the end of the last chapter to trial by examining the opposite phenomena —the removal of the condition induced by nemetic influences. The two investigations must control and confirm each other mutually, in case they be properly managed.

When Miss Blahusch had sat for awhile by my side, in the dark chamber, she began to get drowsy, and, if undisturbed, went into somnambulism and exhibited all its symptoms. This result interrupted the experiments which I wished to make with her in the normal state ; and I studied means of keeping her awake. I found that upward passes, from the body over the face to the eyes, were always effectual to arrest the drowsiness. A few such passes, oftentimes a single one, would suffice to restore her at once to her natural liveliness. The same facts were repeatedly observed with Mrs. Bauer, Baroness Natorp, Mrs. Keinesberger, and Misses Leopolder, Atzmannsdorfer, Rupp, Beyer and others. In every case a slight nemetic management blew away the tendency to somnambulism.

When somnambulic sleep has commenced it may easily be dispelled. All the so-styled magnetic physicians have a multitude of means to destroy it. Such heroic expedients as tubs of water before the bed, and-so-forth, are entirely unnecessary. I know a Mrs. L——, whose son, between the years of ten and twelve, was a somnambulist. After trying every other remedy in vain for the supposed vice, she began to use the rod. When he arose in his bed she began to beat him, but she never succeeded in awakening him. She smote away upon the bare flesh until it was all raw and bleeding, but he showed no sign of pain and seemed to pay no attention to the whipping. The poor mother was frightened ; she did not know the meaning of this insensibility to pain.

§ 28. How to awaken somnambulism.—If, instead of such treatment, she had used a few upward passes over his body, she would have succeeded better. When Mrs. Lederer, Mrs. Kienesberger, Misses Blahusch, Zinkel, Kynast and Krueger were somnambulic, I awakened them with a few double upward passes, from the pit of the stomach to the eyes. Four or five passes over the eyes to the temples sufficed to wake up Misses Atzmannsdorfer and Krueger. Miss Weigand awakened as soon as the fingers of the right hand had passed a short distance over the stomach. I awakened Miss Beyer by two or three upward passes over her toes. Miss Reichel awoke when a pass was made, from her abdomen over her head to the back of her neck, with the negative pole of a magnet, or with a piece of lodestone. On one occasion Miss Zinkel had attacks of colic : I cured them by one or two

passes with my right hand, and at the same time she went to sleep. I supposed her sleep to be normal, and at the end of a quarter of an hour, shook her to wake her up ; but she was in somnambulism, and spoke to me, "thouing" me. I made a few passes from her eyes to her ears, and from her neck to her eyes, and she awoke. When Mrs. Lederer and Miss Dorfer were lying asleep, they would soon awake, if I stood at the head of the bed. Miss Atzmannsdorfer was several times awakened by the mere walking of some one past the head of her bed.

§ 29. The shock from a person departing.—A singular cause of awakening is found in the shock of separation. When Miss Beyer was in somnambulic sleep, in the presence of her physician or myself, the departure of either would awaken her. When Mrs. Anschuetz was somnambulic, holding her husband's right hand in her left, she was at once awakened by his departure. If he did not wish to wake her up, he had to go away slowly and gradually. Once he thought himself far enough away to be able to move briskly, but the consequence was that she started, and almost awoke.

I have had repeated opportunities, of late, to observe a singular mode of awakening in Miss Zinkel. When near the end of her sleep, she often said, "I shall now soon awake ; I feel it coming in my eyes." It may be inferred from this that a nemetic process takes place, and is perceptible to the sleeper for several minutes before it restores him to wakefulness. Then, before waking, she used the points of the fingers, bunched together, to make passes over and touching

the eyes to the temples, with odic slowness ; thus awaking herself by the most methodical upward passes, as though she had thoroughly studied the process, which, however, was entirely unknown to her in her normal condition.

§ 30. Somnambulism an od-negative state of the nerves.—The methods of preventing and dispelling somnambulism have not yet been so fully studied as the means of inducing it ; but, so far as observed, they are all accompanied by influences which accumulate od from without to the nervous centres. Such influences characterize the upward passes to cure drowsiness, and upward passes to stop somnambulic sleep, either over the whole body, over the pit of the stomach, over the eyes or over the toes, with the hands or the poles of a magnet ; and the same may be said of the effect of a person standing at the head of a somnambulist, of the shock of separation, and of the sleep-waker's own passes. This leads us to the principle that *somnambulism is disturbed and dispelled by soretic influences on the nervous system* ; and this principle supports and confirms the one previously arrived at in regard to the influences which cause and favor the somnambulic sleep.

When we take these two principles in view at once —the production of sleep-waking, by the dispersion, and its deduction by the accumulation, of od—we arrive at the important deduction that *somnambulism is an od-negative state of the nervous system.*



CHAPTER IV.

CRAMP.

§ 31. What is the od-positive condition?—The question now suggests itself:—If somnambulism be the od-negative condition of the nervous system, what is the state under the dominion of positive od? We find all kind of cramps in intimate connection with somnambulism; and like the latter they are always the companions of high sensitiveness. It was, therefore, an important portion of my task to investigate whether there were not certain general relations connecting cramp with the odic influences, and whether it might be included and securely classed among the phenomena of sensitiveness. For the purpose of approaching the solution of these questions, we shall consider the circumstances under which those cramps, coming within the range of our present investigation, occur.

§ 32. Cramp common to sensitives.—Most sensitives are predisposed to cramps. Their diseases have usually more or less connection with cramps. All high-sensitives suffer much from them—at least I have found no exception. Mr. Sturm, otherwise a healthy man, has frequent attacks of cramps, which reach from the feet to the hips. Very slight causes suffice to cramp various portions of Miss Dorfer's body. Mr. Bollman

has been troubled with cramps in his hands, arms and feet, since childhood. Miss Weigelsberg was often seized with a cramp in the tongue, which would not permit her to speak ; and any little surprise might bring on this disagreeable condition. Miss Reichel often has cramps of laughing, weeping and mouth-contortions. About a year before I became acquainted with her, she lay, on one occasion, immovable for a considerable time in cramp ; and her friends, supposing her to be dead, were about bury her. Chevalier Sidorowicz often suffers with cramps of the breast. Misses Zinkel, Beyer, Leopolder, Sturmann and others, are thrown into cramps by the slightest causes. Baroness Natorp, fell ill, after delivery of a child, and lay for forty hours immovable in a spasm. I could mention a multitude of other similar cases ; but there is nothing peculiar about them. Everybody may be attacked by such cramps, and I call attention here only to the fact that cases occur chiefly to sensitives.

The transitions from colic and headache to cramps, sometimes through swoon and sometimes without it, are very various. Miss Nowotny suffered for years by headache without cramps ; then the former ceased and the latter began. Mrs. Joanna Anschuetz was troubled, in her youth, by almost constant headache. This disappeared during a certain period, and cramps set in ; and they now cause her continuous suffering. In others, whose health improved, the diseases followed the reverse order. Miss Ernestine Anschuetz suffered, formerly, with cramps, but she is now better ; she is free from cramp, but has headache.

§ 33. **Cramp caused by magnets.**—We shall now

examine the causes of cramps in sensitive persons, and the several odic influences which accompany it. Cramps may be induced in sensitives by the magnet. Every magnet, whether a horse-shoe or bar, when pointed with either pole towards Miss Nowotny's hand, made it stiff and induced a painless cramp. Small magnets, as large as a finger, had to lie in her hand for some minutes before they caused cramp and tied her fingers together. Larger magnets exercised the same influence in less time; very large ones caused a more rigid cramp, and the hand was fixed so firmly upon the magnet that the sensitive was not able alone to loosen her hold. In the absence of her physician, she was accustomed to make passes with a magnet over herself, to bring on sleep. On one occasion, she fell asleep with a single-leaved horseshoe magnet in her hand. After a time, she awoke; the hand clasping the magnet was cold, white, and so rigid, that she could not open it. This cramp was without pain or any peculiar sensation, and extended half way up the arm. When a horseshoe magnet was placed on the eyes of Miss Nowotny, it forced her to close them, and she could not open them until the cramp ceased. If the magnet was placed on her teeth, her lips became rigid, and her speech was obstructed. Perhaps this kind of a lock might be of value to husbands. I requested Miss Nowotny to lie down upon her back, with her head to the north, on a sofa, I then laid a bar-magnet, two feet long, over her stomach, with the northward pole towards the east: and thus the od-negative pole was on her od-positive side. The position was slightly disagreeable, but she submitted and remained quiet. I then turned the bar, end for end, so that the like hu-

man and magnetic poles were brought together ; she could bear this for only a short time ; a disagreeable lukewarm current began to flow to her head, and a cold one to her feet ; followed by colic, swelling of the stomach with a worm-like creeping sensation, burning and watering of the eyes, headache, and cramping-like pains. At this stage of the experiment, I stopped. I laid the magnet, right-angle-wise, at her side, with one pole pointing at her. When the negative northward pole was turned towards her left, positive side, she felt a cool, agreeable sensation ; but after a while, the equalization became complete, and then the soretic reaction of accumulating negative-od began, with luke-warmness, colic, headache, and cramping pains. The southward pole, directed at her right side, had the same effect. Then, on the other hand, I directed the northward pole towards her right side, she was soon attacked by the known phenomena of severe cramp. Finally, the southward pole pointed at her left side, caused heat, worm-like creeping and roaring in the head, cold and twitchings in the feet, and soon cramp had taken possession of all the limbs. I made similar experiments, and obtained the same results, with Miss Krueger.

Magnets exercised a similar influence upon Miss Sturmann, even at a distance. While standing four steps above her head, as she lay in bed, I took the anchor from a nine-leaved horseshoe magnet, and immediately she was seized by a tonic cramp. If I did the same at the like distance below her feet, she fell into clonic cramp. One evening, while Professor Lippich was engaged with her, and Dr. Gaal was standing with me at a distance of thirteen steps from

her, Dr. G. accidentally and slightly removed the armature from a nine-leaved magnet which I held in my hand ; and almost immediately she fell into clonic cramps. I often saw Misses Atzmannsdorfer and Krueger thrown into cramps by magnets, which I took into their presence. These cramps began very soon, when I turned like magnetic poles upon their sides, but immediately when I made a slight upward pass with the southward pole directed at their left sides.

§ 34. By sitting with back to the west.—During the first days of the Catamenia, Miss Zinkel was thrown into violent cramps by sitting down on a chair with the back turned to the west. And even in the intervals between the monthly periods, if her nerves were in an excitable condition, sitting with her back to the west brought on cramp of the stomach very speedily. A turn of her chair with the back to the north was at once followed by relief. Miss Nowotny was affected in the same manner as Miss Zinkel by sitting with her back to the west.

§ 35. By crystals.—Crystals have an influence similar to that of magnets. When I held the od-positive pole of a ten-inch long gypsum crystal towards the left hand of Miss Atzmannsdorfer, her first sensation was a disagreeable lukewarmness; her second sensation was as of ants crawling over her skin ; the third, stomach-ache ; the fourth, twiching and internal waving motions of the arm to the shoulder, with headache; the fifth was spasmoidic yawning; the sixth, burning of the eyes with flow of tears ; and the seventh was the beginning of cramps, at which stage I put an end to the experiment.

§ 36. By Metals.—Amorphous bodies of unipolar character, when they have a strong odic capacity, have much effect on persons disposed to cramps. In this class all the heavier metals are included. When Miss Atzmannsdorfer attempted to clean silver ware she was invariably attacked by cramps, which lasted for an hour, unless I was at hand to cure them. Frederick Weidlich never opens a door-latch with his bare hands, but always uses his coat-tail as a covering for his fingers, knowing that otherwise he would have stomach-ache, head-ache, and perhaps cramp. Misses Nowotny, Sturmann, Maix, Reichel and Atzmannsdorfer, according as they were in a more or less sensitive condition, had to use great care how they touched metallic substances. The touch of door-locks, window-catches, spoons, knives and forks, scissors, jewelry, kitchen-ware, tin-plates, smoothing-irons, stoves, balusters, and other metallic articles, more particularly if of copper or brass, induced cramps. If Miss Atzmannsdorfer ventured in her most excitable periods to eat with a silver spoon, the muscles of her mouth soon became rigid, the spoon was sometimes fastened between the teeth and bitten crooked, and could not be removed until the cramp had exhausted itself. Miss Zinkel occasionally made fire in a large chamber stove of sheet iron; but she could seldom get her fire kindled before she had stomach-cramps. A young Princess von Windisch-Graetz was exceedingly sensitive to odic influences. Miss Atzmannsdorfer was given to her as a companion on account of her experience in a similar sensitiveness; and that position she held until the death of the Princess. A silver spoon was sufficient to throw the latter into a cramp. She could scarcely

take silver coin into her hand before she had a cramp. Once she wished to pay out one hundred gulden in silver; but she was unable to count it, and directed Miss Atzmannsdorfer to undertake the task. The latter counted seventy gulden and fell into cramp. After some time she recovered and succeeded in getting to ninety gulden, where she was again arrested. After another recovery she succeeded in finishing the count. Princess von Windisch-Graetz could not bear the presence of an ordinary looking-glass; it made her sick, and gave her the headache; and if she did not hurry away she would have severe cramps. The influence was nearly as strong on Miss Atzmannsdorfer. She had to go before the glass and then retire ten times before she could finish dressing; an attempt to remain near the glass until she was done, was always punished by cramps. Quicksilver is peculiarly hurtful for sensitives; but all *metals by their unipolar odic character cause cramp.*

§ 37. By crowds.—Human beings lying near one another have the same influence as magnets and crystals. If I lay down by the side of Misses Krueger and Atzmannsdorfer with my head to their feet, they at once cried out and sprang up; and Miss Zinkel did the same, when in the same position, like sides were presented. The two former in these cases were thrown into severe cramps. When fifty or sixty students collected about the bed of Miss Atzmannsdorfer the accumulation of od in her system, threw her into a swoon, which ended in cramps. *The presence of a crowd may cause cramps in sensitive persons.*

If I took the hands of Miss Weigand in my own,

mine being crossed, she soon swooned and then had attacks of cramp. When she folded her hands, she had stomach-ache, and head-ache and cramp-like pains. All similar od-positive influences induced cramps.

§ 38. **By light.**—An assertion, that light alone may cause cramps, may cause astonishment; but the assertion is nevertheless true. When Miss Krueger with a glass rod touched the green rays of an iris formed by sunlight passing a prism, she soon felt pain, and cramps followed. A similar trial of the influence of the green rays of moonlight was almost immediately followed by severe cramps. She was attacked in like manner when she stuck her forefinger into the green rays of the moonlight. I placed one end of an iron wire in Miss Atzmannsdorfer's hand and, upon the other end which reached into another room, I threw the green rays of sunlight. She did not know what I was doing, but she soon complained of a disagreeable feeling, became very faint, and then fell into cramp. Even the clear sunlight, which at first caused agreeable sensations, at last caused cramps.

I placed an iron rod in a north-and-south position, laid a large gypsum crystal, from the mine of Salzburg, at the southern end of the rod and requested Miss Atzmannsdorfer to touch its other end. She did so, and felt disagreeable lukewarmness, stomach-ache, and then attacks of spasmodic yawning and finally cramps.

§ 39. **By upward passes.**—Upward passes with hands are a certain means of inducing cramps in high sensitives. But no person would ever intentionally

subject another to the tortures of cramps for the mere sake of experiment, and therefore there is little opportunity for observation except in such cases as occur accidentally. The slightest upward motions of my hands, near Miss Sturmann, Atzmannsdorfer, Reichel, Girtler, Kynast, Nowotny, Blahusch, Mrs. Anschuetz, Kienesberger, Kowats, Lederer, and others, sufficed to induce cramp or its premonitory symptoms. Miss Beyer could not put on her stockings without feeling pains passing through her feet and back to her head, and she could barely escape cramp, if she hurried herself. The cause of these sensations was evidently the upward passes which she gave herself in pulling on her stockings. On one occasion she was lying on the sofa suffering with cramps which I cured by downward passes, but whenever I moved my hands backward, even at a greater distance so as to make other downward passes, she was invariably drawn up in a tonic cramp.

I accidentally touched Miss Atzmannsdorfer near the middle of the back with my right forefinger. In a few minutes she had a severe headache, and soon after cramp. The touch of the same finger on the vertex of her head deprived her instantaneously of consciousness, and brought on twitching and clonic cramps. That place on the crown of the head called the vertex, whence the hair naturally turns towards all sides, is the most sensitive point in the frame. Misses Reichel, Maix, Sturmann and others were always thrown into cramps by my touching it. Its influence is explained by the fact that the od-stream from the finger flows upward-like upon the nerves known as the *occipitalis major* and *minor*, the *auriculo temporalis* of the *Par-*

anserinus, the *supratrochlearis*, and the *frontalis*. Upward passes over the toes of Misses Sebastian and Zinkel brought on cramp in them. Some upward passes over Miss Beyer's thumbs and toes threw her into cramp which came and went repeatedly during several days. I tried the range of the sensitiveness of Mrs. Kowats by making upward and downward passes at her through the doors of three rooms which were between us. When I went to see the effect of my passes, I found her winking with drowsiness, and endeavoring to resist the approach of somnambulic sleep. That same night she had a severe attack of cramps, which were caused by my upward passes, made at a distance of forty steps from her. I had not foreseen this after-effect, but afterwards learned more of it by experience. A clear light was thrown on these cramp-inducing influences of upward passes by other experiments. I made passes with my left hand over Miss Zinkel's right arm from the elbow to the wrist but no further. I will give the name of part-passes to such motions. The effect was that the arm became cold, the hand warm and clammy, and was pervaded by a creeping and then by the sensation felt in the limbs when asleep. I made a similar experiment on her left hand with my right, making the passes from wrist to the roots of her fingers. The consequence was that the hand became cool, the fingers lukewarm, clammy and uncomfortable in feeling. A pass made with my thumb and forefinger, one on each side of her hand, from the wrist to the root of her middle finger, made this finger warm, clammy and creeping in feeling, while the other parts of the hand were cold. I made passes with my left hand over her leg from the thigh

to the ankle ; and the leg was made cool while the foot was warm, clammy and pervaded with a sensation of creeping. I then made double passes over her breast and body to the thighs ; the body became cool, and the legs and feet warm, and clammy and felt a creeping sensation. I then added four or five more passes of the same kind, and within a minute cramps began in the calves and feet and soon became painful. These cramps could be cured as easily as they were caused. A few downward passes, over the cramped portion of the body, sufficed to restore the normal temperature and easy position of the muscles. *Upward passes of every kind cause tonic and clonic cramps in all high sensitives.*

Even like downward passes cause cramp. Miss Beyer's physician made downward passes over her with crossed arms, and the consequences were colic, headache, and cramps in her fingers and arms. While the same lady was in menstruation, I made downward passes with my right hand over her left arm, after three or four passes it was rigid, with the fingers thrown back in tonic spasms. When I made similar passes over her toes, her legs became rigid. Downward passes, when continued too long, have the influence of upward passes, and cause cramps in Miss Beyer's arms.

Wet feet have a very hurtful effect on Miss Zinkel, and gives her headache ; in Miss Beyer, who is more excitable, they cause stomach-ache and then cramps in the abdomen ; in Mrs. Kowats, they cause colic.

§ 41. By the peculiar odic influence of individuals.—
The peculiar odic atmosphere of some persons, may

cause cramp in high sensitives. Once when Miss Nowotny was in her most sensitive condition, she begged me to take away a gentleman, who was in the room, and whose presence made her feel heat, then stomach-ache, headache, and cramping pains. This gentleman was a polite, good-looking, elderly man, such as many others who went to see her about that time, and there was nothing disagreeable about him that I could perceive. He came afterwards and remained for a time in the room. The consequence was that she fell into a swoon, and then into severe cramp. A gentleman, who had been a benefactor to her, had the same influence upon her, and it required her greatest efforts to enable her to endure his presence. She could give no explanation of her sensations further than that the whole atmosphere about these gentlemen was a torture to her. I imagined that both had suffered severely from disease, which had permanently injured some of their internal organs and therefore gave out an unwholesome odic influence. This influence is od-positive, and thus disposes sensitives to cramp. Miss Maix told me that a certain visitor of her's, had more than once caused her to faint; and Miss Reichel told me of many persons whose company was intolerable to her.

I often heard Misses Reichel, Beyer and Atzmannsdorfer, Mrs. Kienesberger, and Mr. Frederick Weidlich complain that they were full of cramps which would soon break out. This was an anticipation taught by experience that certain peculiar sensations were the forerunners of cramp. They described these sensations as a general uneasiness, a dull pressure towards the head, sleepiness, anxious dreams, and total inability to

sleep. While Miss Reichel was in my house, she often did not sleep for several successive nights, and on one occasion not for three weeks. Miss Karban often suffered from inability to sleep. Frederick Weidlich had, from time to time, periods of sleeplessness, which ended with attacks of cramp. In these cases there was always a feeling of pressure towards the head—a sensation very different from that which precedes somnambulism. Miss Zinkel often discovered in the mornings that she would have cramp in the evening or night by a certain sensation of heaviness which gradually extended from the feet through the legs, and then disappeared in a loss of feeling. All these are the symptoms of od-positive, accumulative influences. When she thus lay down, the death-like loss of feeling extended gradually through the abdomen, then into the chest and ended in somnambulism. Mrs. Anschuetz generally had cramps on the days succeeding those on which I visited her. Miss Zinkel could take part in table-tipping parties at the cost of some disagreeable feeling, oppressive sensations in the breast, and stomach-ache ; but in the succeeding night, she was always attacked by shooting cramps, passing through the hands, feet, arms, nose, knees, temples, thighs, gums and so forth.

§ 41. By mental excitement.—Miss Zinkel gave me the best description of the forefeelings of approaching cramp and its companion, somnambulism. They seldom attacked her without having been invited by some mental excitement. But these mental causes or occasions were often so insignificant that she took no no-

tice of them at the time. And she was the more likely to overlook them, as the attacks usually did not come on until hours, half a day or a whole day later. If the mental excitement was great, such as a great fright, the cramp came on immediately ; but weak moral sensations left impressions on the mind which, separate or acting together, were the causes of later cramps. The first sign of approaching [*latitirender*] cramps was always an irresistible stretching in all her limbs. This stretching is in itself a kind of antecedent weak cramp ; for whenever I made some dispersive passes, over her, the stretching ceased and general rest began. Hiccoughs were also a sign that she would have the cramp, and were frequently its forerunners. Indeed they are a kind of cramp, and I cured them by dispersive passes, by placing the points of my fingers on the pit of the stomach, or most certainly by a glass of water charged with *od*, when uncharged water would have no effect. If, however, the hiccoughs were not arrested, a peculiar yawning soon set in, and this too was a species of cramp. Up to this time, I remained master of the cramps, and could cure them at will by dispersive methods ; but if the disease was neglected in this stage, a sensation of creeping in the stomach followed, the stomach swelled, palpitation of the heart set in, there were internal twitchings in all directions, and then the sufferer was certain of the near approach of spasms, which soon seized, and raged through, her bowels, breast, neck and back, arms and legs.

These examples show that soretic influences may induce a condition in which cramps are latent. These cramps, and the power which sets them a going, are stored away somewhere in the body, probably in the

brain, and afterwards, when circumstances are favorable, they break out in violent activity.

§ 42. By obstructions to the flow of od.—Obstructions are the most powerful causes of cramp. Among the most singular of these phenomena are the facts, that little pieces of wood, crystal, metal, or even of paper laid on the finger-points of highly sensitive persons, cause cramp. I have had examples of this in Mrs. Preinreich, Misses Fleischer, Beyer, Zinkel and many others. There are also practical cases, worthy of notice; no moderate sensitive can wear a thimble. And this is true not only of metal thimbles, which are disagreeable because of the od-positive character, but of all kinds, because they obstruct the flow of od from the finger. Leather gloves are also uncomfortable to sensitives; but silk gloves, with thin meshes, are less disagreeable. Leather shoes cause the same sensations as leather gloves. High sensitives long to put off their leather shoes, and put on cloth slippers, that permit the circulation of air. When unusually excitable Miss Zinkel was not able to put on laced boots, which were not unpleasant to her on ordinary occasions. But in her more sensitive periods they caused cramp, which began in the smaller toes and extended thence to the whole foot. Then she had to hurry to take them off; and soon after that the cramps ceased. These phenomena are the pure effects of obstructions, where the odic emanations from the fingers and toes are more or less intercepted. For this reason, sandals are much better than shoes for sensitive persons.

These experiments and experiences were highly instructive to me. They showed, in the plainest manner,

how cramps arise, as the immediate result of od-accumulative influences ; they give the key to a multitude of phenomena, extending throughout the domain of somnambulism and sensitiveness ; explain a great number of facts hitherto unexplained, and give rational means of avoiding and preventing evils, the remedies for which have been heretofore hidden in uncertainty and darkness.

§ 43. By like odic pairings.—A not unimportant example of the principles just brought to light appears in a process of daily occurrence—the approach of the physician to the sick-bed, and the feeling of the pulse. It appears at first sight, absurd to assert that the patient can care which side of the physician is nearer to him, or whether he feels his pulse with the right or left hand. And yet Misses Maix, Sturmann, Atzmannsdorfer and others, have repeatedly assured me that the feeling of their pulse was particularly painful to them. If I, without forethought, sought to feel Miss Zinkel's pulse in her right wrist with my like hand, she immediately jerked loose from me ; and it was the same if I sought to feel the left pulse with my left fingers. A like pulse-feeling on Miss Sturmann's left wrist caused cramp in her whole arm. I have witnessed a multitude of cases of the same kind, but have not noted them down. The cause is plain. When the pulse of the sensitive was felt with like fingers, a current of od began to run up to her brain and soon overpowered her. But unlike pulse-feeling was at first cooling and agreeable. In the former case, where the wrist and fingers were alike, the natural effect upon a high sensitive would be cramp ; and this effect I observed several

times in Miss Beyer. At her most excitable times she would fall into cramp after her hand had been held in another's like hand for only a quarter of a minute. The approach of the physician to the sick bed has the same influence and, when the patient is very low, becomes a matter of importance. If he presents his unlike side to the patient, there is no danger ; but if he offers a like side, his left for instance to the patient's left, and feels the left pulse with his left fingers, he need not be astonished if the sick man soon becomes red in the face, and restless, or has a fit of cramp or opisthotonus. The physician should never approach with a like side to the sick-bed, and if he does not know this his presence will call forth diseases, of which he is himself the cause. It is clear from these subordinate facts how important a thorough knowledge of the odic phenomena and sensitiveness is to every physician — phenomena which, nevertheless, highly scientific men of the present day, declare to belong among the fables. The only fable-like fact in the affair is their own ignorance.

§ 44. By all od-positive soretic influences.—If we glance over the cited cases of the origin of cramps, we discover a certain general characteristic. The seat with the back to the west is nothing else than a soretic reaction of the od-negative southward pole of the earth upon our right side, and of the positive northward pole upon our like left ; and this influence is precisely similar to that of like poles of magnets upon our sides, whether the magnets be merely pointed at us or used in making passes over us. Crystals used in the same way, immediately or through conductors,

have similar accumulative effects. So also od-positive, amorphous bodies, taken in the left hand, have a purely accumulative influence. The influences of men, when lying near each other with like sides; or with unlike sides for a longer period; or when making upward passes over the body, or over separate limbs, all have the accumulative character. Finally the experiments with Miss Zinkel show in the plainest manner how downward and upward passes, both lead immediately to cramp, where they have the effect of accumulation, but prevent or drive away cramp whenever they have the dispersive influence. We thus arrive at the conclusion that while *upward passes never induce somnambulism, soretic influences always induce cramps* particularly through the means of like and od-positive agencies.

§ 45. Cramps cured by nemetic od-negative influences.—If now the question be asked how the cramps caused by soretic influences may be removed, the reply is indicated in the experiments made with part-passes, upon Miss Zinkel, as before mentioned; and that reply is, "with downward passes over the cramped limbs." Wherever soretic influences have been at work, whether in driving the odic fluid from the outside of the body to the nervous centres, or from the nervous centres to the extremities, thus causing cramps, those cramps may be cured by a few downward passes. I have frequently cured cramps permanently in less than a minute by unlike downward passes over Misses Nather, Weigand, Krueger, Kynast, Reichel, Nowotny, Wonter, Sturmann, Rupp, Girtler, Beyer, Martha Leopolder, Weigelsberg, Atzmannsdorfer, Blahusch, Mrs. Lederer, Kie-

nesberger, Anschuetz, and many others. I have wrought such cures on Miss Zinkel frequently of late. When she has fallen into tetanic cramps with or without somnambulism, I have invariably relieved her by some nemetic passes over her breast, fore-arms and hands, feet and toes ; when I took her unlike hands in mine and placed the ends of my fingers as near as possible to hers, or placed my unlike fingers on her toes, the cramps would frequently go in less than a minute. Sometimes, and the fact is remarkable enough, I succeeded when I came early enough in arresting and preventing the cramps by merely placing the points of my fingers on hers, and bringing my toes, though covered with boots, as near as possible to hers. There were cramps which attacked her every day and extended over her arms, legs, breast and neck, and were accompanied by opisthotonus. The struggle of the so-retic cramp-attack against the nemetic influence from the extremities was shown by a multitude of signs. The cramps disappeared in twitchings of the muscles of the back, of the *Rectus Abdominis* and the *Biceps*. On one occasion when I sought to prevent the approaching cramps on Miss Zinkel, besides placing my fingers upon hers, I breathed upon the pit of her stomach. This breathing had a strongly dispersive influence, and caused a piercing cold and negative sensation. By this means I was still more emphatically and speedily master of the cramp, which was so subjected, that Miss Zinkel passed an easy and cramp-free night. I am convinced that if intelligent aid were at hand in time, most cramps, particularly those of the hysterical kind might be mastered and cured. In the cases cited, the sufferers had a sensation as though a fluid was

passing from their head downward through the breast, back, arms and feet, and when I placed my fingers and toes against theirs they felt as if the downflowing current were arrested in its course and turned backwards. These may all have been mere secondary sensations to which no value is to be attached ; but I mention them here for the completeness of the view of the interesting facts, where the most violent cramps are conquered when in the full force of their approach by purely odic means, applied in the nemetic way.

§ 46. Somnambulism and cramps, opposite odic conditions of the nervous system.—Then we have a result precisely opposite to that arrived at in regard to the origin of cramps, namely : that cramps are arrested and cured by nemetic influences working upon the limbs attacked.

Uniting the two results that accumulative treatment of the limbs causes cramp, and nemetic treatment cures it, and we arrive at the second main principle that cramps are, in their general character, od-positive conditions of the nervous system.

We have already seen that somnambulism is caused by nemetic treatment, is destroyed by soretic and therefore is to be considered as a want of odic fluid, an od-negative state of the nervous structure.

And on the other hand, we find that cramps are caused by soretic, and are cured by nemetic treatment, and therefore are to be considered as od-overcharged conditions of portions of the nerves, which are in an od-positive state.

And thus after carefully distinguishing the various natural phenomena in this tangled field, we arrive at

the clear recognition of the conclusion that *somnambulism and cramp are two opposite odic conditions of the nervous system ; the condition being negative in somnambulism, and positive in cramp.*

CHAPTER V.

SOMNAMBULISM AND CRAMP IN CONJUNCTION.

§ 47. The two occurring together in the human body.

—If somnambulism and cramp are two opposite od-polar conditions, each being caused by such passes as cure the others, it would be but reasonable to suppose that if they were to meet in the same body they would mutually destroy each other. Yet, in fact, we see that this is not the case, but that they often exist together, and that sensitives are frequently affected by both at once. In such cases, they are mingled together in the most confused manner. And precisely in these facts may be found one of the causes why their mutual relationship has heretofore been so inexplicable to pathologists.

To avoid being lost in the labyrinth which has been building since the time of Puysegur, we must hold fast to the guiding line offered in the fact that od may exist in both conditions, negative and positive, in one body at the same time, and that both conditions may exercise an influence outwards. A bit of wood which I whirled round between the fingers of both hands and thus charged at the same time with positive and negative od, and then placed in Miss Zinkel's hands, caused her to feel two sensations, one lukewarm, the other

cool. If I placed the ten fingers of both my hands at the end of a stick of wood or glass, a sensitive person could feel at the other end the currents of warm and cool od. This peculiarity of the od, may also be traced in the light phenomena, where the blue flames of the right fingers, and the red flames of the left fingers, were both purple when the current of one hand was discharged upon the other. When I grasped one end of a glass rod in both hands, it emitted a blue-red flame from its other end. Similar phenomena were noted with magnets and crystals. Enough, I have observed a vast number of facts, showing that when the odic currents of opposite poles flow together, they do not destroy each other, as do positive and negative electricity, or bind each other fast as magnetism does, or neutralize each other as affinity does, but that the two forms of od may exist near each other and with each other for a time of unknown duration, and that each may, in the mean time, exercise its peculiar influences.

This is the Ariadne's thread which must lead us through the tangled passages of the labyrinth of somnambulism and cramp. If the plus and minus od may exist together for a measurable length of time, without neutralizing each other, in inorganic bodies, they must be found in still more intricate relations in organic living beings, where there are so many different materials to fasten upon. It is now my task to produce facts showing that such intricate relations of the two odic conditions really do exist in animate bodies.

It is not an uncommon occurrence, known to nearly every physician, that the usual cramps of highly sensitive persons are, as a general rule, accompanied by

somnambulie sleep. This was the case, innumerable times, with Misses Nowotny, Reichel, Atzmannsdorfer, Krueger, Beyer, Kynast, Winter, Zinkel, Sturmann, Krebs, Dorfer, Mrs. Kienesberger, Mr. Weidlich and many others. Most of the ordinary cramps took place with simultaneous somnambulism, the exciting causes of which were known in only a few cases. But these causes were often clearly discoverable in cases brought on by artificial means.

§ 48. Both caused by touch.—It happened that once I placed the point of my forefinger exactly on the vertex of Miss Atzmannsdorfer's head; and immediately she lost her consciousness and fell over in somnambulism, and in less than a minute clonic arm-cramps began. At that focus all the recurrent sub-cutaneous nerves of the head meet; those on the left being od-positive, and those on the right od-negative. My strongly od-negative right forefinger took possession at once in so sensitive a person, of the left nerves nemetically, and of the right soretically, the former influence made her a somnambulist; the latter threw her into cramp: and at the end of half an hour both influences had exhausted themselves, and she was again in her normal condition, and at ease. On another occasion, I placed both my forefingers on her head in the same place. The effect was so severe that she at once cried out, fell into somnambulism, and at the same time had a violent attack of cramp, which lasted for half an hour. The cause was the same as in the first case, but stronger on account of the application of both fingers, which operating alternately and in opposite directions upon the cutaneous nerves of the head, caused som-

nambulism and cramp. In this case, currents of positive and negative-od were, at the same time, thrown upon each class of nerves, and yet they did not neutralize each other, but the sensitive was mastered by their four-fold influences, all in operation at the same time. I witnessed similar cases in Misses Maix, Reichel and Sturmann.

§ 49. **By passes.**—Professor Lippich induced a similar case, but in a reverse direction :—that is, from the feet upwards. He visited Miss Atzmannsdorfer, then lying ill in my house, treated her with magnetic passes, which were very agreeable and beneficial to her. He ended these passes by placing his right hand under the soles of her feet, so that two fingers rested upon the left foot and three upon the right, and he held his hand in this position for some time. The passes threw her into somnambulism ; but the holding of his right fingers under her soles brought on cramps. The skillful physician told me that these were nemetic cramps, which brought the disease from the head to the extremities—so far was he from a proper understanding of the effect of his own operations ! His influence on the left positive foot was nemetic and cooling for one minute ; but he maintained the position too long ; an overcharge resulted ; and the effect then became soretic. His influence upon the right foot was still worse ; his negative fingers were strongly soretic upon the negative foot. The consequence was, that the patient's wholesome sleep was broken by violent cramps, and then he justified himself, after therapeutical fashion, by a combination of words without meaning. In this example I could follow the precise course

of the nemetic and soretic influences step by step, as they developed themselves in the body of the sensitive.

If Miss Beyer was suffering under very painful headache, threatening to go over into cramp every minute, and I made two or three unlike passes over her toes, the pain ceased ; but at the same time she fell into somnambulism. When Miss Zinkel was attacked with cramp, no other remedy was necessary than that I should place the points of my unlike fingers or toes against her's. The cramp ceased, and the young lady became somnambule and slept for quarter of an hour in quiet.

If I placed the finger-points of both my unlike hands on the two sides of the *solar plexus*, she soon became somnambulic, and began to talk. If I crossed my hands and moved them over the stomach on like sides, she soon fell into cramps, which disappeared with the somnambulism.

Whenever this young lady attempted to wash any linen, and rubbed up and down with the right arm crossed over the left, she always felt great inconvenience, and soon had to quit her work, or submit to attacks of somnambulism and cramp. The cause of these attacks lay in the numerous upward and downward passes which she made over her own arms, working soretically, nemetically and dispersively upon herself at the same time, and thus induce both somnambulism and cramp. Miss Zinkel had frequent attacks of stomach-aches in the dark chamber and elsewhere. In these cases I would give her three or four passes over the body and down past the feet, and the sickness was removed. While I was making the passes, she

already began to feel drowsy, and as soon as the cramp was cured she found great difficulty in remaining awake. This sleepiness was the effect of my nemetic treatment, and it commenced before cramp, brought on by other influences, had ceased. I once made a couple of passes with the negative pole of a gypsum crystal held in my right hand held over the right hand of Lady Elise von Seckendorf at Carlsbad in the presence of Berzelius, and the consequence was that she became somnambulic at once, and her arm was stiffened with a cramp. So ignorant were we at that time, the great natural philosopher and my insignificance, that we both supposed the phenomenon to be a trick, and with the most beautiful experiment in our hands, we would investigate the subject no further! Years passed by before I discovered the whole extent of my error, and Berzelius died without having obtained the explanation. The strongly negative influence upon the negative hand of the highly sensitive lady was instantaneously soretic, and before I could move my hand, cramp ensued. The pass, however, rendered this more mild, and she went over into somnambulism. Both conditions passed away within half an hour and the lady was again wide awake. Thus things have gone on ever since there have been somnambulists in the world ; the clearest thinkers have misunderstood the entangled phenomena and were even ready to denounce them as tricks. It was the same with myself, and my numberless enemies will long continue the same course. I afterwards made the same experiment with the same crystal upon Miss Weigand, and saw the same phenomena again developed.

§ 50. **By magnets.**—I have seldom seen passes made with the poles of a horse-shoe magnet over high sensitives without their being attacked at the same time by somnambulism and cramps. Both came upon Miss Sturmann after one such pass had been made over her. Misses Nather and Reichel, Frederick Weidlich, Alois Bayer, and many others were afraid of the magnet and would have nothing to do with it, because they had learned its good and evil effects from a long experience. A few passes with such a magnet made across a room at Miss Atzmannsdorfer caused watering of the eyes and yawning, as forerunners of cramp and somnambulism. There is no worse instrument for magnetizing than a horse-shoe magnet in the hands of ignorant persons, and nearly all who use it are ignorant, for no one considers that the opposite poles have opposite influences, and that the human body has its opposite poles which are differently affected by the same powers. I have always seen the magnet used without any regard to the distinct natures of the two poles, one of which causes effects directly the reverse of those produced by the other. The consequences of simultaneous soretic and nemetic influences are somnambulism and cramps existing together. The metal as distinct from the magnet, is strongly od-positive and works soretically on the positive pole of the body, and the hand which holds the magnet adds its influence which pours through the metal. Thus the horse-shoe is a combination of all possible od-influences, which might be expected to produce the confused effect observed to follow its use. And therefore all high-sensitives abhor it, and with abundant reason.

§ 51. **By green light.**—All highly sensitive persons find the influence of the green rays of the spectrum disagreeable, avoid them, and suffer when subjected to them. Miss Krueger repeatedly fell into somnambulism and cramps when she allowed the green rays of the moon-spectrum to fall upon her forefinger. I shall find fault with no one who may laugh at this assertion, and imagine that the affection was merely imaginary ; for so long as I did not understand the matter I treated it in the same way. But now I understand the connection of cause and effect in these phenomena. Green is not a simple color ; it is not even a compound but only a mixed light. If we mingle fine yellow powder and fine blue powder together, the result will be a powder which appears green ; but there is nothing green there. The whole mass remains a mixture of fine blue and yellow particles. The red and yellow rays in the spectrum are od-positive, and the blue, negative ; and they effect sensitives accordingly. If blue is cool to the left finger, and yellow lukewarm ; then a mixture of blue and yellow should exercise nemetic and soretic influences at the same time ; and if the person experimented upon the highly sensitive, the result should be somnambulism and cramp at the same time. Such are precisely the effects of the green rays upon the sensitive organization, as I had repeated opportunities for observing in Miss Krueger. It is scarcely possible to desire a pure, more conclusive, or more beautiful example of instantaneous production of these two opposing states of the nervous system.

Mrs. Kienesberger was affected so much by a crowd of persons near her, that on returning from a ball or theatre, she has often fallen into somnambulism or

cramp, just as happened to Miss Atzmannsdorfer when surrounded by students at the Clinical Institute.

It has repeatedly occurred that after I had made a variety of odic experiments on highly sensitive persons, they have had attacks of somnambulism and cramp an hour or two later. Of this I had examples in Mrs. Joanna Anschuetz, Mrs. Kowats, Misses Beyer, Martha Leopolder, and many others. These results were more likely to occur if I followed up a particular experiment; that, namely, of trying the range of the influence of my double passes. The sensitive subject was then usually placed three or four rooms distant from where I was, and I made passes at various distances till my influence could no longer be felt. Thus I learned the range of my passes and the degree of the subject's sensitiveness. In these experiments my influence, though weak, was necessarily both soretic and nemetic; and it sufficed to throw high sensitives into somnambulism and cramps. Mrs. Kowats felt this effect so plainly that no pleading could induce her to take part in any more odic experiments.

These examples suffice to establish the fact that *somnambulism and cramps may, and often do, exist together in the human body; and that such states of joint-occupation occur when soretic and nemetic influences of sufficient strength are exercised at the same time.*



CHAPTER VI.

THE MUTUAL RELATIONS OF SOMNAMBULISM AND CRAMP.

§ 52. Their influence on each other.—Sensitive persons who are subject to somnambulism, are rarely attacked by cramps alone. The cramp is usually accompanied or followed by somnambulic sleep. When a severe cramp was about to attack Miss Reichel she, as a general rule, fell sometime previously into somnambulism, remained in that state as long as the cramps lasted, and for several hours afterwards. Before the attack came on she was low-spirited and weak ; after it had passed, she was lively and good humored while in somnambulism, as though she had been refreshed. The cramp had evidently relieved her from a pain, from an oppressive feeling which had weighed upon her. Misses Atzmannsdorfer, Girtler, Weigand and Krueger, when I observed them, always became somnambulic before falling into cramps, and remained in that condition for sometime after the spasms had passed. Mrs. Kienesberger frequently slept ten or twelve hours quietly but talkative, after her attacks of cramp. Frederick Weidlich remains somnambulic for seven days after an attack of cramp. Mrs. Krebs, while somnambulic for weeks together at a time, had tonic cramps in her arms and legs, every morning for about an hour

beginning at ten o'clock. The numerous cramps of Miss Beyer always ended in somnambulism, so far as my observation went. Miss Zinkel, who has become a somnambulist only of late, often told me that when cramps of the stomach, caused by handling metallic substances or by sitting for a long time with her back to the west, had left her, they were succeeded by a coolness that changed to a peculiar drowsiness. This last sensation was very strong, and if she submitted to it, she fell asleep and slept for an hour, at the end of which time, warmth began, then a light sweat came on and with this she awoke. All these phenomena are of a purely somnambulic character. Of late Miss Zinkel has suffered much from illness, and her sensitiveness has become much more acute. She has often fallen into somnambulism and the most violent cramps at the same time. If she became somnambulic, the cramps began half an hour afterwards, then ceased, after an hour or half an hour again came on, and again ceased ; the sleep being unbroken. Thus whole nights were passed in constant change. In most cases, the cramp began in the bowels, and passed as rigid spasms into the limbs, and then changed to somnambulism, or the two states began at the same time. However, there were cases wherein mild cramps came on alone, and passed off without the appearance of somnambulism; but these cases were comparatively few.

The causes of this kind of reflex-movement may be different in the various cases ; but it is certain that they usually lie in the odic dualism of the human body and in its threefold odic axes. The influence which is soretic upon one pole is nemetic upon another, and thus may induce cramp and somnambulism at the same

time. Great caution is necessary in forming an opinion upon particular cases to take into account all the various influences and to give to each one of them its proper importance. It is possible and not improbable that the exertion of an influence upon one pole itself creates a counterbalancing action at the opposite pole, as has been observed in magnetism and electricity ; but I have made no satisfactory observations on this point, and therefore content myself with merely suggesting it as a matter not to be overlooked.

§ 53. **Cramps caused by slight soretic influences.—**

High sensitives may be thrown into cramp by causes so slight, that physicians cannot be too careful. There is a great difference in the odic influences of the methods in which the hands may be grasped, of the modes in which passes may be made over the various limbs ; and variations which are scarcely perceptible and which are not thought of, may produce very dissimilar effects on sensitives. For instance, when I gave my hand in the most favorable position to Misses Beyer and Zinkel, that is my right in their left, finger on finger, and inside to inside, crossing downwards, I supposed that all must be well, and that all the conditions necessary for a comfortable position were observed. But there was something wrong. If the points of the sensitive's fingers extended beyond mine, even for the length of but half the last joint, though the whole hand felt the nemetic influence, yet the little projecting finger points were affected soretically ; they became warm and felt uncomfortable, and if the sensitive was unusually sensitive, my continuing to hold the

hand was followed by cramps which commenced in the fingers and afterwards extended to the hand and arm.

§ 54. **By surcharge of od.**—Here we must turn to the phenomenon of the surcharge of od. When by passes I cured Miss Zinkel of cramps of the stomach and breast, or Miss Atzmannsdorfer of breast and neck cramps, or Miss Beyer of arm-cramps or *opisthotonus*, or when I threw Miss Beyer and Miss Reichel into a deeper sleep, a certain number of passes cured the illness, and then the sensitive bade me stop. If I made more passes I again brought on the evil which had been driven away by previous passes, and it became worse than before, for now further passes would not cure it but only make it more acute. When Miss Zinkel was lately attacked by a disease of the abdomen and suffered much by various cramps, she would often grasp my hands and set the points of her fingers against the points of mine, but she would endure this position only half a minute, and then let me go. Sometimes she would request me to take hold of her toes with my unlike hand, and then a minute after I had done so she would draw her feet back. The first influence was highly agreeable, refreshing, cramp-curing, and causing cold sensations reaching up through the whole arm or foot. This coolness rapidly disappeared, and at the end of a minute it was entirely gone, and a state of nervous indifference had taken its place. If she did not then immediately draw back from touching me, or if I did not take away my hand from her breast, pit of the stomach or neck, an overcharge immediately followed ; warmth succeeded the coolness and increased so rapidly that in another minute the cramps came on

again. Breathing and blowing upon Miss Zinkel had the same effect. While she had cramps of the breast, she felt the greatest relief from my breathing, but this durst not last more than a quarter of a minute ; so far it was exceeding refreshing, very cool and cramp-healing, and all rigidity loosed itself at once ; but now it was necessary that I should stop, otherwise warmth would follow the coolness, an oppressive feeling came over the brain and the cramps broke out again more severely than before, having been called back by improper treatment. To understand all these relations accurately is clearly a matter of the first importance to therapeutics.

§ 55. **By part-passes.**—I witnessed similar results with Misses Beyer, Zinkel and other when I made passes over their arms and legs during cramp and carelessly stopped the passes at the wrists or ankles in the haste to make new passes. The scarcely subdued cramps broke out again immediately, without my being able to comprehend the cause. This was the influence of "part-passes," which I did not learn to understand until later. The incomplete passes exercised a soretic influence on the extremities of the limbs, and this reactionary influence increased with every pass, until it became as strong as the nemetic influence higher up, and then threatened to weigh it down.

Another striking example is the following : While Miss Zinkel allowed her hands to hang down, I placed my unlike finger points against her's, touching them. At first the influence was cool and pleasant on both hands : afterwards this sensation disappeared and nervous indifference set in. Still later, lukewarmness,

discomfort, a worm-like creeping sensation followed ; then pains in the stomach, threatening to change into cramp, and I abandoned the experiment. For the correctness of these observations, I found a counter-proof with odic light. I placed my right hand in Miss Zinkel's left, in the dark chamber. Both immediately became more luminous than before, and the sensation was agreeable. But the light soon grew dull, and, in half a minute, both hands became invisible ; the coolness disappeared, and disagreeable luke-warmness succeeded. If the hand-grasp continued, her hand felt the worm-like creeping, and pains of the stomach and incipient cramp followed. In all these cases there was an overcharge, or, rather, there was an opposite mischarge, whereby positive od was laden upon the negative fingers and negative od on the positive fingers, thus creating an artificial likeness of odic polarity in the opposite limbs, and inducing secondary soretic reactions with incipient cramps.

While Miss Beyer was in her most impressible condition, in my house, it often happened that when I gave her a good nemetic pass down over either the right or left arm, she felt an agreeably cool sensation, and yet the arm became cramped. For a long time I could not understand this. At last, when I had investigated the part passes and learned to know their meaning, the matter was clear to me, and I could divide the phenomena into their elements. I had never made the pass with pedantic exactness out beyond the outermost points of the fingers, but I had only gone to the hand, or partly over it. When we examine the influence of the part-passes, we see that, as nearly all the mesmeric physicians do, I created an agreeable neme-

tic influence over the whole arm, but charged the hand and fingers soretically by allowing my pass to stop when it reached them. My operation was therefore incomplete and partial, and while I supposed that I was bringing the greatest quiet over the sensitive person, I heaped upon the hands the material that would excite cramps, which would then break out, to my great astonishment, and take possession of the whole arm. It happened to me in the same manner with part-passes over the thighs and feet and brought me to start back in fear from my own defective art. When in later experiments, I carefully lead the passes out beyond the points of the fingers and toes, the cramp ceased to appear in this manner.

§ 56. By passes over the recurrent nerves.—A fourth noteworthy case of this kind happened with Miss Beyer. One day I made downward passes over her arm; sometimes she felt them agreeable and cool, and afterwards disagreeable, and finally she felt cramp in her arm. On a close investigation, it appeared that the passes were always agreeable and of a nemetic character, when I led them down over the large nervous trunk on the inner arm. When I deviated from that the influence was disagreeable in places. When I closely examined these places and the formation of the nerves in them, I found that invariably there were recurrent subcutaneous nerves there in unusual strength and with numerous branches. This was particularly the case upon the back of the arm, especially of the upper arm. And if I continued to make passes over her, the girl fell into somnambulism, with tetanus in the arms. Thus it appears that apparently regular downward passes over

the arm, in unlike pairing, may throw a sick person into cramp, if the pass does not carefully turn out of the way of the subcutaneous recurrent nerves, with a more exact knowledge of their position than is to be found now in our elementary books.

§ 57. By slow passes.—It even happened when my passes were too swift or too slow, that Miss Beyer was thrown into cramp. The slow passes had this effect, because they delayed too long before arriving at the finger points, and exercised a soretic influence on the hand and lower part of the arm, before the nemetic influence was felt there.

All these thousand-fold complex fine relations must be accurately known and considered, if the application of the odic force to therapeutic purposes is not to lead every moment to the greatest mistakes, and the production of effects precisely contrary to those intended. But where is such knowledge to be found now in the present state of magnetic therapeutics? And could any one have such knowledge, since these relations were completely concealed until the present time? And what right has any one to take offence when, in my *Odic-Letters*, I styled the present conduct of physicians a "blind groping"? And is not the correctness of my statement vindicated that the results of magnetic cures rest upon the most unsteady and insecure foundation—and, in fact, on no scientific base at all?

§ 58. Soundness of somnambulic sleep.—Somnambulic sleep is, in itself, when undisturbed by soretic influence, as quiet as any other sleep. Misses Atzmannsdorfer, Kynast, Reichel, Beyer, Nather, Dorfer, Krue-

ger, Zinkel, Mrs. Kienesberger and Frederick Weidlich slept quietly in my house, some of them for long periods, and never was there any sleep-walking unless there were peculiar irritations. Such irritations, however, are numerous, internal and external. They always operate soretically, some of them od-negatively, others od-positively.

Somnambulic sleep is usually pleasant and refreshing like other sound sleep. When the sleepers are spoken to, they reply cheerfully, in a friendly, happy mood which is apt to change to the playful and jokose. Miss Atzmannsdorfer was always much more cheerful and friendly in somnambulism than when awake. Miss Reichel, usually grave when awake, was always fond of fun in somnambulism. I never saw Mrs. Lederer otherwise than very serious or sad when awake ; but, as soon as the magic stroke has passed over her and thrown her into sleep, she was freed from all her cares; the burdens and bonds of life were cast off and she was a changed person, lively, romping, laughing and full of play. When her physician awakened her, the sadness caused by her condition in life, returned. Misses Atzmannsdorfer and Amelia Krueger while in somnambulism described their condition to me minutely ; they often said that the moment when their sleep began they felt sensations in their brains as if they were made lighter, and as a consequence of this, their mood became more cheerful, yes even such bodily pains, as they might have, were either much relieved or driven entirely away. Miss Krueger described the condition of ordinary dreaming as very different from that of somnambulic dream ; the former she said was filled with worldly griefs and cares and was often more painful

for poor people than real life ; somnambulism was a care-free, happy state, where everything appeared in rose-colored light ; all sorrows, all injustice suffered, and other cares were there taken very lightly, and if she happened to remember anything, the thought of which could pain her, she passed laughingly over it, always turning towards cheerfulness and jollity. These are her own words, as she spoke them to me while in the somnambulic sleep which she was describing. It is well known that the somnambulists often sing and that they give themselves up to amusing remarks, if they are not disturbed. I found, however, that this condition of good humor is different from sound, good sleep, only in degree. I know from much experience, that I myself, far removed from all somnambulism, when in deep sleep see everything in rose-colored light, am friendly towards my bitterest enemies, and have the kindest feelings towards them. These good humored moods must therefore belong to sound sleep of which somnambulism is only an exaltation.

§ 59. Somnambulism under active odic influences.—
The course of somnambulism is different however when it is influenced by od. It gains depth and strength, and therefore comfort, when it is supported and assisted by nemetic treatment. Many ill sensitives were unable to sleep unless they were aided by downward passes. Miss Sturmann has to be served every evening at nine or ten o'clock with some passes by her physician, Professor Lippich, at a distance of arm's length, before she can go to sleep. I have often been present on these occasions, and saw how lively she was as though she did not think of sleep ; but after the right

hand of her physician had made three or four passes over her, she was fast asleep in somnambulism. Innumerable times by one or two passes I threw Miss Atzmannsdorfer into sleep in the evening, and she sank in somnambulism upon her couch; and I might say the same of Mrs. Krebs, Miss Girtler and Catharine Rupp. Miss Nowotny was always made to sleep by passes with magnets, and she learned the use of those instruments so well that she used to go to sleep by making passes over herself with them.

§ 60. Change from waking to somnambulism.—The change from the waking condition to somnambulic sleep was never a long and gradual one, but a sudden leap, in an immeasurably brief time. I have often seen sensitives break off in the midst of a sentence, having changed from waking to sleep. This was the case with Misses Atzmannsdorfer, Sturmann, Weigand, Nowotny, Reichel, Beyer and Kynast. I have heretofore told how Misses Reichel, Beyer, Atzmannsdorfer, Sturmann and Krebs praised the comfort of having a few passes made over them after they had fallen asleep, particularly just before one left them; and often when I was about to go they would say: "Do give me only a few passes, I beg, so that I may sleep soundly." Much more complex are the influences of soretic treatment on persons in somnambulic sleep. I have already spoken of the cases where sensitives have been thrown into cramp in this manner; and now I am to speak of the weaker effects, causing slight disturbances of the sleep.

§ 61. Influence of position in sleep.—One of the lowest effects of this class is that felt by the somnambulist when he lies on his right side, with his back

towards a near stone or brick wall. Another case is when his head is turned towards the west or south. A third case is that of a person sleeping on the other side of the wall, in a reversed position. In all these and similar cases, where soretic influences are at work upon the somnambulist, he will not rest well. He will thrown himself about on his bed and will soon lose his covering. He will then sit up and commence to speak ; then he will get up and go about his room in somnambulism, and if he can, he will open the door and go out. From such and similar causes I innumerable times saw Misses Clementine Girtler, Atzmannsdorfer, Reichel, Kynast, Blahusch, Sturmann, Dorfer, Rupp and Beyer, and Mrs. Lederer, and many others, walking about freely, with closed eyes and asleep.

§ 62. **Moonshine.**—A similar cause, and one of about equal influence, is the moon. The moon's rays are chiefly od-positive. They are not so strong with light as to cause cramps, but just strong enough when operating upon the od-negative side of man to keep him in somnambulic sleep, and when operating upon his od-positive side to rob him of his rest and make him lively. These two contemporaneous influences acting upon sleepwalkers, are the causes of their activity in moonshine. The soretic irritation is not strong, but just so tempered as to enliven and cheer ; the nemetic influence is just suited to render the sleep deep and agreeable. Thus the somnambulist is solicited by two attractions, and walks about in the moonshine. Miss Atzmannsdorfer found that moonshine enlivened and cheered her, excited a love of fun when she was asleep, but sunshine made her sleep more soundly.

This agrees with the influence which might be expected from the od-positive rays of the moon and the od-negative rays of the sun. If she was, however, in somnambulism when she was exposed to the moonlight, it irritated her, deprived her of her good humor and made her quick to get angry.

Miss Angelica Sturmann, at a time of full moon, was in the habit of getting up every night, tearing open her fastened windows, and clambering along the side of the house, on a narrow projection of the wall, whence a fall to the pavement below would have certainly killed her ; and one evening an attempt was made, while she was somnambule, to compel her to promise not to get out of the window that night ; but she positively and stubbornly refused to make such a promise. She asserted confidently that she would not fall down ; and she added, with an expression of delight, that the moon was a source of such pleasure to her she could not deny it to herself ; she must be allowed to enjoy it. A watch was set upon her and the window was tied fast. The moon rose at two o'clock, and she then, in her sleep and while the watchman slept, tore the curtains and bands away, opened the window, and went out in her night-gown, upon the cornice, where her neckerchief was found the next morning, and on which she must have clambered round the house.

Lady Baroness Von Natorp did not know that she was restless at night. One morning she could not comprehend what had become of the night-gown which she had put on the evening before, and she was told it had been found in the hall down stairs. This happened during a night of beautiful moonshine. She

watched herself, and observed that many little changes were made in her household—changes which nobody save herself could have made and of which she had yet no recollection. Finally it was discovered that all these things were done while she was sleep-walking, and always when the moon was full.

Miss Nowotny often assured me that the moon exercised no influence on her. Once she lay for a long time in bed, and when she at last got up and opened her writing desk, she found a half finished purse and several half finished letters in her hand, but she knew nothing of their commencement. The letters were dated the 3rd, 4th, and 5th March, days which had passed several weeks previously. I looked back in the almanac and found that the moon was full on the 4th March. She had therefore undertaken all these things while walking in her sleep, and she was not a little astonished at the discovery. Misses Atzmannsdorfer and Reichel were always very uneasy at full moon, walked about in their sleep, clambered about upon roofs and did other dangerous things. A sleep-waking baroness whose name I am not permitted to use, wrote from the neighborhood of Vienna to her physician in the city, urgently requesting him to come to see her. He went, but she knew nothing of the letter, and she was struck with terror when she saw her own hand-writing, without being able to comprehend how such a thing could have happened. It was discovered that she fell into somnambulism every night about two o'clock, and in that state, while the moon happened to be full, wrote the letters as stated. Max Krueger created disturbances in the Orphan Asylum where he was bred, by getting up in moonlight nights

and walking in his sleep. Mrs. Krebs rose from her bed in the moonlight, walked about, jumped over tables, clambered up upon doors and so forth. Miss Krueger was strongly affected by moonshine ; she always went in her sleep to enjoy it at the window, and would attempt to go out, but if she was not permitted to do this by her servant, she would for the purpose of obtaining the consent of the latter, assure her that she would not fall. Miss Girtler had to be closely watched during full moon, for she was very restless at night and would undertake the most daring things. On such a night I saw her in a singular excitement, which if not carefully watched would have led to very dangerous adventures, and she did everything with such activity that her movements could scarcely be followed. Miss Winter in her most susceptible time happened to be in Graetz. The communications which I received from various other persons about her conduct in the moonlight at this time affrighted me. Her restless and violent actions caused an uproar not only at the home where she was stopping, but the whole street. If she was resisted she seized her maid watcher, struck her, and in her paroxysms showed such an extraordinary strength that she threw down the strongest men, who finally were struck with fear at these apparently supernatural things. Many of my sensitives, who were not somnambulists had brothers or sisters who were sleepwalkers, and uneasy at times of full moon ; thus Professor Roesner had a brother and Chevalier Hubert von Rainer was one of seven children of whom four, two of each sex, as well as their father, were all somnambulists and caused much bother on that account in their house.

§ 63. Duration of somnambulic sleep.—Somnambulic sleeps are of very unequal duration. Sometimes they pass away within five minutes, or they may last an hour, a day, a night, a week, a month, and even a much longer period, but I have witnessed none lasting more than a month. Miss Atzmannsdorfer often lay five or six days at a time in unbroken sleep in my house. Friedrich Weidlich's fits of somnambulism usually continue about a week. Miss Kynast slept from four to six weeks at a time. Mrs. Krebs had lain in uninterrupted somnambulism several months when I first saw her, and continued in the same state as long as I could visit her.

§ 64. Somnambulism for women and cramps for men.—This somnambulic sleep becomes sometimes a diseased drowsiness. Mrs. Reichel in her most susceptible periods would fall asleep in any place, and went in her sleep through the streets of Vienna. Miss Beyer also fell asleep in the streets. She was for a time so subject to the attacks of somnambulism that she would go to sleep in any place, and she was found sleeping in all corners; once when she was cleaning some knives, she suddenly went to sleep, and her head falling, her face was cut on the point of a knife which she had in her hand. She would at times become somnambulic when in conversation. The same happened to Miss Atzmannsdorfer. If Professor Lippich, myself, my daughter, or servants approached her at certain periods, she would fall asleep in less than a minute. Misses Kynast, Blahusch, Krueger, Dorfer, Karhan, Mrs. Kowats, Mrs. Kienesberger, Friedrich Weidlich, and Alois Beyer had all similar periods, when

the approach of myself or others caused an immediate drowsiness which soon changed to an irresistible sleep.

There are also on the other side sensitives, who are equally susceptible to stomach-ache, stomach-cramp, fits of megrim head-ache, and cramps of all kinds, and to a similar degree. These are chiefly demi-sensitives, such as Mrs. Joanna Anschuetz, Mrs. Mueller, Mrs. Preinreich, Lady Baroness von Natorp, Misses von Weigelsberg, Glaser, Zinkel, Messrs. Gustav Anschuetz, Fichtner, Tirka, Joseph Czabek, Klein, Kollar, Kotschy, Dr. Loew, Mr. Delhez, Dr. Machold, Dr. Mielichhofer, Barons Henry and August von Oberlaender, Councillor Pauer, Chevalier von Sidorowicz, Mr. Sturm, and many others. There appears here to be a kind of opposition among sensitives, some being more inclined to somnambulism and others to cramp-like affections. The women seem to be more subject to somnambulism, and men to pains of the head and stomach ; and from this we may infer that the female sex is more easily affected by negative and nemetic influences, and the male by positive and soretic. Such at least is the general deduction from the statistics of my sensitives. This influence is, however, not sufficiently established to be relied upon, and I mention it here only as an aid to further investigation.

§ 65. Periodicity.—Somnambulism and cramps seem, when observed superficially, to commence without regularity, as to time. This seeming, however, is due altogether to the fact that at every moment there are unexpected and accidental external irritations, which cause violent attacks of somnambulism and cramp out of season. But, if we carefully observe the facts, and

exclude the accidental and strong attacks upon the free development of nature, we shall see an unmistakeable and regular periodicity revealed. Miss Nowotny had her attacks of cramp every day, at 6 P. M., and the hour changed gradually as the days grew longer, in the spring, to 7 o'clock, so long as everything was quiet in the house. But when disturbance and mental excitement was brought in from without, the attacks came out of season, at midday and in the afternoon. When everything was quiet, Miss Krueger fell asleep every day at noon. The same was the case with Mrs. Kienesberger. Miss Beyer went to sleep every evening, between 6 and 7 o'clock. I found Miss Weigand in somnambulism every evening at 5 o'clock.

These irritations often followed a certain rhythm through the course of the day. Thus Miss Beyer regularly felt cool in the morning ; this disappeared in the middle of the day, and towards evening her whole body was warm, and then the attacks of cramp and somnambulism came on.

§ 66. Temperature of the body.—The commencement of cramp, as well as of somnambulism, were always preceded, so far as I observed, by cold in the feet and hands, and warmth in the head. This was the rule with Miss Nowotny, and her gradual cure kept pace with the restoration of warmth in the feet, by means of magnets. Friedrich Weidlich often complained about the constant coldness of his feet and warmth of his head, before his periodical attacks. The deeper the sleep of Miss Atzmannsdorfer, the colder her upper and lower extremities ; but after she awoke

she became perceptibly warmer. Miss Beyer's hands and feet were always cold when she fell into somnambulism, in my house, and then tetanus soon followed. I observed that with Miss Zinkel cold limbs and a warm head always were the forerunners of cramps, and while they lasted, a perspiration broke out upon the head. This was what might have been expected from the soretic condition in which she was. But, at the same time, she was somnambule, and consequently nemetic. When at last the cramps passed off, and she awoke, there was a frostiness and goose-flesh over her whole body. These did not disappear for some time, and were caused by the nemetic influence which had exclusive control after the disappearance of the cramp.

§ 67. **Swellings.**—A peculiar but universal phenomenon in highly sensitive women, during fits of somnambulic cramp, is a swelling over the stomach, immediately under the girdle. People think it a protrusion of the stomach, and physicians expressed the same opinion to me. They believed that the pilorus and the cardia had been drawn together by cramp, and then gas developed in the stomach, which was thus protruded, there being no exit for the gas. I give the explanation for what it may be worth, but I have often observed the fact of a swelling over the place of the stomach. Miss Zinkel confessed that this phenomenon always ended with belching, and that soon after air escaped. But a more singular fact came to confirm the opinion of the physicians. If this swelling existed at a time when Miss Zinkel attempted to drink water, the liquid could not get down into the stomach. If I now placed the points of the right fingers on the swell-

ing, the passage seemed to be opened and she could feel the water running down into her stomach. The cardia was therefore in fact drawn together by cramp; my fingers loosened it, and the passage was opened to the water. The commencement of the swelling, as I observed innumerable times, was always attended by a worm-like movement of the flesh over the stomach, as if it were alive—seemingly a kind of peristaltic motion. While this was in progress I could cure the evil, which had been caused by soretic influences. If I now worked nemetically, by making some double passes from the neck to the thighs, with short delays over the pit of the stomach, which now began to swell, the worm-like movement decreased and within one or two minutes ceased, and the pain disappeared. If I was not present to stop the evil, the pain in the stomach changed into a cramp, then into a cramp of the breast, then into neck-cramps, and the region of the stomach swelled up to a frightful size. My slightly sensitive daughter Hermine was the first non-somnambulic sensitive in whom I observed the incipient stages of the worm-like motion over the stomach, with pains of that organ. In the secondary stages I observed it accompanied by slight swellings, in Misses Geraldini, Schwartz, Martha Leopolder, Armida Geraldini, Mrs. Margaret Kowats, and Mrs. Mueller, (the last of whom always felt very nervous at such times,) Mr. Leopolder, Joseph Zinkelbaier, and innumerable times in Miss Zinkel, whom I could always cure by downward passes. It was the most violent in Misses Reichel and Beyer, in whom the swelling was larger than the breasts, and became a deformity. The worm-like movement could always be felt inside of the swelling. The evil is

increased in Miss Beyer when any one stands or sits behind her for a long time, when she eats onions, or when upward passes are made over her. It is caused by soretic influences. The phenomenon was so frequent in Miss Atzmannsdorfer that little attention was paid to it at last. I observed its medium stages in many sensitives, but it was always accompanied by cramps of the breast and stomach, which I could create by soretic treatment with upward passes, and so long as they had not got the upper hand, I could dispel it at will. The further explanation of the pathology and therapeutics of the matter I must leave to the physicians.



CHAPTER VII.

THE CONDITION OF THE SENSES.

§ 68. **Touch.**—It is well known that in somnambulism the external nerves have lost more or less of their acuteness, a condition which resembles that of swoon, narcosis, numbness in extreme cold, and the state of a man whose nerves are cut or tied up. I have collected many examples of this insensibility, but as this quality of somnambulists is well known, I shall give but a few of them here, for the purpose of showing how completely sensation is dormant. Miss Reichenel, while somnambulic, stuck pins into her flesh, even in her hands, to satisfy me how little feeling she had. I saw Miss Nowotny severely pinched and pricked by physicians, without her moving a muscle. I myself pricked Misses Atzmannsdorfer and Sturmann in the arms with a penknife, and they did not wince. While Miss Zinkel lay somnambulic in bed, I took hair-pins from her head and pricked her with them in her arms, at many places, and lacerated the flesh with them. She had her eyes shut, and did not show the least sign of pain, but finally asked me why I was pricking her. In reply to my question, whether she felt any pain, she said "No." I continued to prick her, and now she

was offended, not at any bodily pain, but at the insult. It was evident from this that though she felt what I was doing, the feeling was not accompanied by pain. The sensory nerves were deprived of their functions, but she had other means of perception, notwithstanding her closed eyes. Miss Beyer was pricked deeply in her hands with needles, in my presence, and pinched till the blood came, but her sleep was not disturbed. After several weeks had passed, I often tried the same experiments upon her, and always found that the nerves of touch were inactive in the places which I wounded.

§ 69. Smell.—Many cases have been observed of the temporary loss of smell during somnambulism. I have tried Miss Atzmansdorfer in that condition with spirits of ammonia and substances of similar pungent odor, and they had no effect on her. But I found an opposite case when, without saying a word, I placed formichlorode under Miss Beyer's nose. Although she did not feel the prick of a needle, she recognized the pleasant odor of the chloroform, and praised it and said it made her sleep deeper. I think it probable that all somnambulists can by their smell distinguish between the positive and negative poles of the magnets, even when they can smell nothing else; but I have not yet made the experiment. Attention must be paid to the like and unlike sides of the nostrils in this matter, for they have poles, as well as the magnets.

§ 70. Hearing.—When Miss Nowotny lay in her attacks, she heard nothing so long as they lasted. Miss Krueger, while in somnambulism, usually could not

hear, but there were intervening periods in which she could hear for a few minutes, and then deafness ensued again. Mrs. Joanna Anschuetz often became somnambulic and then hearing ceased. On such occasions she could not hear the loud voice or even the screaming of her husband, though her ordinary sleep was very light, and subject to disturbance by the slightest noise. But with all other high-sensitives in somnambulism, I could converse very well, and in most of them the sense of hearing seemed to be but little changed from its ordinary condition. When Misses Reichel, Sturmann, Atzmannsdorfer, Beyer, Zinkel and others felt no pain from pricking, I could conveniently converse with them ; and they understood every word, consequently there must be cases of somnambulism where the hearing is lost for a time, and others where the hearing is good as in the normal state, or even more acute.

§ 71. Hearing at the pit of the stomach.—A singular fact to be stated in connection with this part of our subject is the hearing through the pit of the stomach or through the hands. It has long been known that somnambulists, when they had entirely lost their hearing and did not perceive the loudest noises made at their ears, would yet suddenly move and give replies if they were spoken to with the mouth close to the pit of the stomach, or to the hand. A beautiful case of this kind is reported by Mr. Purkinje, from his own observation in Wagner's *Handwoerterbuch der Physiologie* (Vol. III, part 2, p. 448). Such cases occurred with Misses Beyer and Zinkel. As an experiment I spoke some words in a slight whisper in Miss Krueger's

hand, and she was astonished to hear them plainly. She said the words came through her arm as through a speaking trumpet, and had struck her ear as if spoken with a loud voice. The same was the case with Mrs. Joanna Anschuetz. I then advised her husband to speak in her hand the next time she should become deaf. There was soon an opportunity for him to try the experiment, and he reported with joyful astonishment that when his wife was in her deaf sleep so that she could not hear his loudest outcries at her ear, he had whispered lightly in the hollow of her hand and she understood him at once and answered him, accompanying her reply with expressive gesticulations.

§ 72. Hearing in the hand.—I tried other high and demi-sensitives, who could not hear through their ears, by whispering in their hands. I whispered lightly in the hand of Mrs. Lederer while somnambulic ; she heard me very plainly, and also used the expression that the sound came up to her ear through her arm as through a tube. Miss Kynast clearly heard the slightest sound running up through her arm to the head. I whispered in the hands of Mrs. Joanna Anschuetz, in her ordinary condition, Mrs. Kienesberger, Lady Baroness von Natorp, Friedrich Bollman, Mr. Rabe and Councillor Pauer, and all understood me although they could not hear me when I spoke in the same tone at the same distance from their ears and away from their hands. Miss Dorfer heard better through her right hand than through her left, her right side being the more sensitive. Miss Beyer in her waking condition heard very well through her hands ; when in somnambulism she heard well with her ears but better through

her hands, and could even understand me when my whispers were so low that I myself could not hear them. Miss Atzmannsdorfer in somnambulism had good hearing, but when I spoke in her hand she heard in two ways; quickly in the ordinary way; more plainly and perceptibly slower through the hand. She felt the sound moving upwards through her arm to her head in a brief but measurable space of time. She thought the sound was caught up rather by the finger-points than by the hollow of the hand. She observed to me that she had long known this from her own experience, and that it was her custom, when anxious to hear distinctly, to hold out her hands and fingers towards the point whence the sound came. Another time she told me that in somnambulism she heard everything less clearly, as though spoken in the distance, except when I spoke in her hand, and then she heard clearly. This is characteristic of the whole condition. We see that an odic movement commences at the finger-points and moves with its peculiar slowness up the nerves of the arm.

This fact appears still plainer from the experiments with Miss Zinkel. I spoke in the hollows of her right and left hands, and then spoke the same words upon the united finger-points of both hands together, and she heard the words spoken there more clearly than those spoken in the palms of her hands. The seat of the perception for sound is therefore in the finger-points.

I then by turns spoke upon the right and the left finger-points, she perceived that she heard much clearer on the right than on the left side. The sound was therefore perceived more strongly on the like than on the unlike pole, and thus proved itself to belong to one pole.

Finally I spoke to her alternately upon the finger points and away from them, in every case holding my mouth at the same distance from the sensitive's ear and speaking in the same direction. The result was that when I spoke upon her right fingers she understood me better than when I spoke in the air and better when I spoke in the air than when I spoke on the left finger points. All these facts go to show the odic nature of these phenomena of hearing.

Here a phenomenon accompanying those hitherto mentioned deserves a place. When I spoke upon the finger-points of some sensitive women, they felt a sensation similar to that of an upward pass going up through the whole arm, under the shoulder, across to the nipple of the breast, where it concentrated and passed out ; and immediately afterwards a similar sensation passed downward through the legs, following, as described to me, the course of the sciatic nerve. On the left side the sensation was disagreeably lukewarm ; on the right arm it was less unpleasant. The bare breath did not produce the same effect, neither did low speaking ; it required the voice. The peculiar sensation passing downwards through the feet and particularly in the toes was felt by Miss Zinkel, and stronger in the right toes than in the left. All this appears to be in the highest degree noteworthy.

§ 73. Odic hearing at the stomach.—It was the same with the pit of the stomach as with the hand. All sensitives upon whom I experimented, whether in somnambulism or in their waking condition—Misses Reichel, Atzmannsdorfer, Sturmann, Kynast, Maix, Mrs. Anschuetz, Kienesberger, Friedrich, Weidlich, and

many others—heard more plainly when I spoke close to their stomach-pits. Councillor Pauer heard the ticking of his watch always on the pit of his stomach, and when nervous he could hear at his stomach every stroke of a violin played in his presence. At a time when Miss Zinkel was peculiarly sensitive, I made the following experiment with great care ; I spoke first on the right and then on the left side of the pit of her stomach. The effects were very strong but also very different. On the right side she could hear my words clearly, on the left indistinctly. But this apparently unimportant experiment had such an influence on her that she was immediately attacked by pain in the stomach, which swelled up in a few minutes, and was soon attacked by severe pains, and she had to hurry to sit down to avoid falling. I took hold of her hands, made some passes over her body, and placed my unlike fingers under her toes. The pain was alleviated at the end of one minute, and was entirely removed after the lapse of three. Here also we see all the signs of odic action. Where like poles came together the od-negative voice on the right hand or on the right side of the solar plexus (the chief ganglion of the sympathetic nerve) the influence was soretic and went upwards to the brain, where it was felt. Where unlike poles came together, the negative voice on the positive left, the influence was nemetic, and went downwards away from the brain, and the hearing was dull. These facts are very important to sustain the theory.

Thus we see the susceptibility for odic movements is so great in the hands and the pit of the stomach, that is in the solar plexus and in the numberless nerves on the finger-points, that they carry the influence of even

low notes to the brain with such clearness that words are better understood through them than through the ear, and even understood when the ear entirely refuses to perform its duty in somnambulism. That these phenomena are odic in their nature is shown among other things by the influence of the sounds on the breast-nipples and feet, by the slowness of its conduction, and the characteristics of polarity.

§ 74. **Taste.**—Similar observations have been made in regard to taste, and a few examples will be given here. When Miss Beyer had to handle vinegar or lye and got her fingers wet with them, she tasted them in her mouth, particularly if she is in a susceptible condition—for instance, during menstruation. Not long before she told me this, she had used some ox-gall in washing, and she could not finish her work, because of the bitterness of the gall in her mouth. Although she washed her hands off immediately with soap, the bitter taste in her mouth yet continued two days: the gall had been rubbed into her skin, and so long as it remained, so long she tasted its bitterness on her tongue. When Mr. Fichtner passed his hand over dirty oxidized brass, he felt the nauseating taste of verdigris in his mouth, and he could not get rid of this taste till he had washed his hands with soap. When I put antimony in Miss Atzmannsdorfer's hand she tasted its bitterness in her mouth. Misses Zinkelbaier and many others had a coppery taste in their mouth whenever they took copper money into their hands during menstruation. Professor von Perger is like Mr. Fichtner in regard to touching brass; and if he takes a piece

of iron in his hand, he feels an iron-like taste in his mouth. Similar phenomena are observed by all demi-sensitives.

The physicians say this a consensuality of the nerves, but that is as much as to say they do not understand this phenomena.

§ 75. Sight.—Nearly all somnambulists keep their eyes closed. I saw them sometimes open only in Miss Winter, and Mrs. Lederer, and Miss Girtler ; all others kept them shut as in ordinary sleep. I often opened their eyes by force—for instance, in Misses Sturmann, Reichel, Atzmannsdorfer, Beyer and Nowotny ; the pupils were in some turned upwards, in others downwards ; in all the cases I could touch the bare whites of the eyes without their appearing to feel it.

Miss Beyer's eyes were turned downwards, and while her physician held her lids open, I held a burning candle as close as possible to her eyes. We could not perceive that the enlarged pupil contracted in consequence of the proximity of the light. She held perfectly still. Afterwards, however, she complained, while still in the somnambulic condition, about the light, which, as she said, had got into head. Whether the disagreeable sensations in her head thus complained of, were caused by the light of the candle, or by the chemical od emanations of the combustion is a question which must lie over for further consideration.

It is evident that there could be no sight by the ordinary means under such circumstances. The sight of the eye was lame and inactive in all these persons in somnambulism, as has been long well known in similar cases.

§ 76. **Seeing with the eyes shut.**—Nevertheless, these persons saw all the objects about them, more or less clearly, as well by day as by night, and sometimes with an astonishing exactness. In chapter first I mentioned some examples, and like examples are in everybody's mouth, as occurring without number in every land, so that I can pass on without dwelling longer on this point. I have only to say here that this perception of the external world by somnambulists has come before me so often, that there is no longer room for any doubt. How it is the mind can receive impressions of light and of the form of the physical world, so that a picture resembling an optical impress is painted in the soul—how this can be, is a problem for the present.

§ 77. **Explanation of seeing without eyes.**—I do not admit, however, that this problem is so entirely beyond the power of solution as is asserted by our physicists and physiologists, who think they have the right to straightway reject as untrue the thousand-times confirmed facts. I am satisfied that the odic laws which I have discovered must furnish a solution to this problem, or at least supply hints which will point out the road to the causes of the enigmatical seeing of somnambulists without using their eyes. How does it happen that a piece of glass or mica, or crystal, water or air appears transparent to us? Certainly only because we perceive bodies, on which light falls, beyond them. We agree that these bodies send out rays of light to our eyes, through the transparent substances which permit the rays to pass through them. It matters not what kind of a radiation this is, provided only that we have a sense to perceive it. To be perceived

by the eyes, the radiating medium must be light. In the eye is the retina, a web of nerves laid completely bare to the light such as cannot be found in any other part of our body. The light-rays by passing through certain substances and then falling on the bare nerves come to our perception, and then we call those substances transparent. If we had a distinct instead of an indistinct apparatus for perceiving the rays of heat, we should see through diathermanous bodies with our heat-eyes, as we see through diaphanous with our light-eyes, and we should look with tolerable ease through dark glass, clouded topaz and black mica, and clearly recognize everything sending out heat-rays behind them.

Let us now apply these ideas to od, which as we know, emits rays as light and heat do, and pours down from the planets and stars ; we have learned that it passes through every thing—walls, iron, copper, zinc and lead, glass, wood, air, water and so forth—similar but not exactly like magnetism ; and we know finally that it continually streams out, day and night, from all substances, and communicates itself to the surroundings of each. If now we had an organ, a sense for this queer thing called od, and if that sense should catch up the odic rays as our eye does the rays of light, and if we should perceive in our mind the rays as they come to us from every substance, the result would evidently be that we should have a representation, according to well-known psychological laws, of the position of the body sending out the odic rays, and by means of the odic light we would see od-luminous, and od-illuminated substances.

§ 78. High-sensitives have a sense for od.—Now

then, *high-sensitives have such a sense*. Why it is, and how the sense is constituted, I know as little as other learned people know about the constitution of the senses of smell, taste and touch. But that such a power of perception does exist in extraordinary condition of health is proved by this entire book, in innumerable concurring experiences. Since od passes unchanged and without interruption through the skin, and since the numberless nooses, ends and ganglions of the nerves must be considered as bare for od, as the retina-nerves are for light, therefore the whole body, or rather the whole nervous system may be called only one eye, through and through, for radiating od. Low-sensitives, when in the dark, use their eyes to assist them in perceiving the odic rays ; but high-sensitives, particularly in somnambulism, when the eye ceases to perform its functions and the lids are closed, have the entire nervous system as an organ of perception. All sensitives recognize the perceptible effects of od, but the high-sensitives chiefly the odic flame, the odic light and its rays. Where the rays find clear passage through other bodies, the result is about the same as when light rays fall on glass. A plate of metal for a high-sensitive bears the same relation to od that a plate of glass does for a common person in relation to light. As in the latter case the rays of light go through, so in the former case do the rays of od. Glass is permeable for rays of light ; rock-salt for rays of heat ; metals and other bodies are permeable for rays of od. Since now a high-sensitive person obtains pictures and representations of objects by means of the odic rays which they emit or reflect, and these pictures and representations must be obtained when the rays have to pass

through intervening substances, which last may be called *diodanous*, or permeable to od, [as we say "diaphanous," permeable to light, and "diathermanous," permeable to heat.] Metals are particularly diodanous bodies, and so are all bodies of continuous substance, such as crystals, but unconnected pieces such as paper, powder, cotton, are diodanous in a low degree. There is therefore in man a dormant power, which in certain nervous diseased conditions is awakened and made active, and is able to see with more or less clearness through many bodies otherwise opaque, while on the other hand some substances permit the passage of odic rays with wonderful ease and exactness.

§ 79. Vision clearest in darkness.—One of the most important features of somnambulism is that in that state the sight is better in the dark than in the light. The somnambulists therefore see not by means of the light but of some other medium.

Miss Girtler described to me as well as she could that her sight was good in proportion to the depth of the darkness about her. All common light was a burthen to her, pained her and dimmed the clearness of her perception. When it was perfectly dark she could see the forms and colors of the objects about her almost as clearly as when awake in daylight. I inquired for further particulars but learned nothing more. She declared that though she saw without using her eyes, yet she did not know how.

Miss Weigand, when somnambulic, often told me that she perceived surrounding objects with a distinctness that increased with the depth of the darkness. Candle-light, and moonlight still more, caused her sight

(with closed eyes) to be much less clear. When Miss Reichel, in somnambulism, saw sandle-light at a distance she walked away ; and if an attempt was made to detain her she became impatient and the light had to be taken away. When I visited Miss Zinkel in somnambulism at night, her first word was always to request that the light should be put out ; she said it hurt her and prevented her seeing. But her eyes were closed. When I had put out the light she expressed satisfaction, and assured me that she could see me much better. Mrs. Krebs, in her long periods of unbroken somnambulism, could endure no light, and it was necessary to keep her chamber in deep darkness day and night.

§ 80. Miss Atzmannsdorfer's statement.—When Miss Atzmannsdorfer was deeply somnambulic, she made similar declarations. As the first condition for seeing clearly, she demanded complete darkness. Whenever the weakest glare of daylight or candlelight became perceptible, her sight was less distinct. She could still see in open daylight but much less clearly. When I demanded of her a comparison between the clearness of vision in somnambulism and darkness on one side, and the normal state and daylight on the other, she said she saw all the outlines much more clearly in the latter. Nothing shows more satisfactorily that in somnambulism is not the function of the eyes alone, than the desire of sleep-walkers, as I heard it from them on every occasion, that the light should be removed and the assertion that they could see best when it is darkest ; that is, they see best when the medium through which the eyes see is most completely removed.

Consequently the sleep-walkers see through another medium which, under all the circumstances, with their high sensitiveness to od, can scarcely be anything save od.

In the consideration of all these declarations it must be remembered that all light falling on objects is reflected to the seeing eye. Yet the light, which the somnambulist does not see, is not reflected alone to the eye, but is accompanied by od which comes with the rays of light, and which is perceived with closed eyes. When he is in complete darkness he perceives objects by means of their odic radiation, but when light comes and mixes itself with the odic rays there is a two-fold radiation, and the somnambulist unable to distinguish clearly between them, has his vision obscured.

Miss Atzmannsdorfer gave the further explanation that she could see through many objects, so that she could perceive second and third objects behind them. If a number of glasses of different colors and shapes, heated to a slight glow, were piled up in a box, the non-sensitive eye could see some of those below through those above ; and thus the sensitives in somnambulism see many objects through and behind others.

§ 81. Miss Krueger's statement.—Miss Amelia Krueger, when somnambulic, made a similar explanation to me. She found it difficult to give me a clear description of how she did see. She had studied some modern languages grammatically, and therefore was better able to express her ideas than most of the other somnambulists of my acquaintance. Like Miss Atzmannsdorfer, she explained that she saw objects as translucent—seeing one through others ; the objects shining through

each other somewhat as if they were colored glasses. Yet, she added, the somnambulists view of things is not so clearly defined, but they appear more as if they were melted together, the outlines being less definite than when seen by the normal eyes in daylight. All this agrees accurately with the odic nature of bodies, where one sends its odic rays through another and thus makes the latter transparent.

§ 82. Scientific explanation of ordinary vision.—
I cannot explain how the somnambulic mind receives an impression of the forms of the bodies within the range of perception from the odic rays as perceived by the nerves, but neither can the physiologist explain to me how the light-pictures thrown by the crystalline lens on the nerve-coat of the retina are carried to the brain, and changed there into psychical conceptions of the material objects which emit the rays of light. He can trace his light-picture to the opaque retina where it stops; and thus he and I have made like progress, and are puzzled by similar problems. The explanation and the comprehension in both cases stop at the same limit.

§ 83. Clairvoyance brought under natural laws.—
Now that we have reached the principal laws of the matter, and based them on the foundations of experience, we perceive that, as the ghosts over the graves of the dead, so also a large part of clairvoyance, horribly distorted as it has been, comes within the domain of natural science. Every one will now understand that there are men who can read writing shut up in metallic boxes, not only by day but also in the darkness of night, and not only with open but also with

closed or bandaged eyes. I have seen Miss Girtler spontaneously take up a book and read to me with closed eyes as readily as when she had her eyes open. Miss Atzmannsdorfer, less sensitive, has innumerable times in my presence taken up objects and distinguished them by placing them at the top of her forehead, objects which she could not otherwise distinguish, her eyes being closed by disease. The sensitive perceptive faculty was unequally distributed in her body; in some places the perception was much more acute than in others. And since this is true according to natural laws and has been confirmed by my own experience, we can comprehend and explain how a high-sensitive can perceive what is going on in an adjoining closed room, in a neighboring house, in a house across the street and so forth. We now understand how it is that a high-sensitive, sick abed with closed eyes, expecting the arrival of his physician, suddenly cries out "Now he is coming: he has just come into the house; he is on the stairs; he is about to open the door." Such things have often been observed; and very lately by Dr. Stainer.

§ 84. Seeing into the human body.—Again we can now comprehend how a high-sensitive can see into his own body, and perceive its interior as if in a looking-glass; as Misses Sturmann, Atzmannsdorfer, Girtler, Krueger, Reichel, and many others have often assured me that they have done; and finally how they can see into the bodies of other persons near them and perceive organic defects, which no physician could discover, such as putrefaction, tubercles and inflammations in the lungs, liver and stomach. When I asked after the

manner of their perception, they told me the interior of the body appeared rather as luminous than as illuminated; the luminousness being different in color and intensity; the stomach giving out a strong white light; the liver and lungs weaker light, etc. Miss Atzmannsdorfer repeated to me the simile of the glowing hot glasses in a box, but covered with a transparent liquid. A non-sensitive eye looking down in daylight would see all these glasses; and in a like manner the sensitive eye sees and distinguishes the internal organs of the human body, all slightly luminous. Thus Miss Zinkel, with whom, when somnambulic, I often spoke about her condition, always assured me that her left ovarian tube was clear and clean, but the right one was dark and diseased. Miss Girtler requested urgently, when in somnambulism, that the looking glass should be covered so that she should not see her viscera in it, as the insides of anatomical subjects are seen in the dissecting rooms. Mrs. Krebs made a similar request and for like reasons. Cloths, as I have shown, are the worst conductors of od, and therefore are suitable to prevent the odic rays from going to and coming from the looking glass. Miss Krueger assured me that in the highest susceptibility of somnambulism, she had once seen into the body of another person, perceiving the viscera with tolerable clearness, the stomach most clearly; and she had often seen the internal parts of her own body. On such occasions she could distinguish the various parts, and all appeared to be in a healthy condition save the heart, which suffered from a malformation. She said all the organs were luminous, as in an odic sense, they must be, since chemical action and motion of liquids are constantly going forward in them. It

is in this purely physical manner that somnambulists are sometimes of service in the medical art, discovering the nature of disease and foreseeing its future course, and telling such things as whether there is a prospect that a woman will become a mother, and what the sex of her offspring will be, what is in a locked drawer, what people have hidden in their hands or their pockets, whether a certain card is a heart or a club, a king or a knave, etc. To sick sensitives, walls, drawers, pockets, and closed hands, are all diodanous, transparent for their sense, though opaque to us. For them a metallic box is like a glass bottle ; a body or a closed fist covers what is within like a veil. The odic emanations continue night and day; the odic light is perceived better in darkness than in daylight ; and since in the highest phases of somnambulism the eye is inactive and without vision, though the perceptive power operates by other means, partly by the whole nervous system, partly by particular places, for instance at the top of the forehead, as in Miss Atzmannsdorfer, in others at the pit of the stomach and at the ends of the fingers, so it is quite indifferent to the high-sensitives, whether their eyes are bandaged and glued over or not ; it is for them about the same as it would be to bandage the elbow of a non-sensitive, who has good eyes, to keep him from seeing a camel.

§ 85. Dangerous revelations by clairvoyance.—It will be observed how dangerous this condition is for the surroundings of sick sensitives, and for themselves, and on the other side how advantageously it may be used, under certain circumstances, in learning the existence of good and evil. In my own house it happened

that a somnambulist whom I introduced there denounced a servant girl for immoral conduct, in which nobody believed, and the truth of her declaration was only established after the lapse of months ; and other revelations which she made caused a revolution in the house, and resulted in the dismissal of several servants. Miss Beyer was seen one still moonlight night to rise from an apparently quiet sleep, which, however, was somnambulic. She was silently observed. She lay down on the floor, crawled with much difficulty under the bedstead, and finally came forth, her eyes being closed all the time, having in her hand a copper kreuzer, of which no one knew anything. She laid the kreuzer down on the table and went again quietly to bed. She had felt the radiation of the copper through the bed. No secret act that is done in the house escapes the all-piercing eye of the acute sensitive, and their ordinary talkativeness tells everything without selection. As agents of the police and the inquisition somnambulists might render extraordinary services in many cases, and in so far it is fortunate that high clairvoyance lasts only through short stages of certain diseases, ordinarily enduring only a few hours at a time, often periods of only a half or a quarter of an hour, which periods are repeated at irregular intervals of two or more days. Wise physicians may use this power with great benefit, to examine the doubtful condition of diseased internal organs ; but ignorant and foolish persons will commit mistakes and do evil with it.

§ 86. Summary about clairvoyance.—I have given thus what I have found to be true in regard to clair-

voyance. It is just enough to be misused by ignorant and conscienceless men. To one view of this sad side I shall give no attention. But I cannot conceal a deep regret that men of high worth and physicists of comprehensive learning are often so weak as to convince themselves that they may undervalue matters of the highest scientific importance, because ignorance or meanness may misuse them for wicked purposes. There is nothing mean in nature, and least of all in those objects which grasp deep into the spiritual nature and innermost essence of humanity, as do the subjects of this treatise. Such a short-sighted prejudice is as absurd as the folly of others who worship clairvoyants like idols, and make laws of their inconsiderate expressions. Clairvoyance has some phases which must excite the highest interest in all thinking men, who have sufficient capacity to break through the spell of outward appearance, and direct the probe towards the grounds laying deep beneath. I believe that I have reached and uncovered those grounds from two points of view: from the direct and reflex odic phenomena, which healthy persons, with rare exceptions, do not see, and from the diordanous nature of bodies, which offers the key to solve the singular enigmas of sensitiveness, and enables us to comprehend things heretofore included within the domain of insanity.

With this every one will be in a position to draw the dividing line between the true and the false, between the trustworthy and untrustworthy, between honesty and dishonesty, in the field of clairvoyance. Predictions about the fate of men, assertions about events occurring at a great distance, statements of the condition of affairs beyond the limits of our world, or

beyond the range of our existence, etc., find no explanation in physics, certainly not now, and belong to the territory of diseased fancies, and a little observation will always show that they are entirely wanting in logical connection.

I have not as yet collected further observations in regard to clairvoyance—this very important phase of the somnambulic phenomena, which should be studied very carefully and conscientiously—and I shall postpone till another time the more thorough study of it, because I consider the physical bases of the odic phenomena as the most important, and as necessary for the foundation of every investigation of the other high psychical branches.

But from the little heretofore communicated, the significant facts are established in regard to most high-sensitives in the somnambulic condition, that—

1. *They have their eyes closed.*
2. *Nevertheless, they perceive the forms and colors of the external world.*
3. *Their perception is better and stronger in darkness than in light.*
4. *They perceive bodies as, in a certain manner, translucent and visible through each other.*
5. *In the same manner they can look into the human body.*
6. *This perception is not so clear as our ordinary vision in daylight.*
7. *This perception finds the beginning of its explanation in the diodancy, in the permeability of all bodies, metals, glasses, the human body and the nervous system to the odic rays, all the nervous gaughings being considered as eyes for od.*

CHAPTER VIII.

THE MUSCLES IN CRAMP.

§ 87. Cramp an involuntary contraction.—Cramp, as is well known, is an involuntary contraction of the muscles, and therefore a violent exertion of force which passes over from the nerves to the muscles. Such at least is the physiological theory at the present time. This exertion of force may be involuntary and spontaneous, or intentional and developed by an exercise of the will. By what means the nervous system thus accumulates power we do not know. When cramp is spontaneously developed in high sensitives, its approach is usually announced by certain premonitory symptoms. The sensitives are restless, they feel timid, the blood rushes to the upper part of the frame, the feet become cold and the head hot; the nights pass away without sleep, the nerves become more impressible and irritable. The enemy is now at the door.

If the cramp is introduced by artificial means we find all the phenomena to be odic. The power is accumulated by soretic treatment of the body, whether by upward passes towards the brain, or by downward part-passes, if their influence be soretic in places. I have shown that a hand, an arm, or a foot would be cramped when I made passes over the arm, stopping

at the wrist or over the leg stopping at the ankle. These cramps, of a purely voluntary creation, are the immediate consequence of soretic influences, which may be considered as an accumulation of od in the cramped limb. The result is the same when upward passes are made over the arm or over the body towards the head, they throw the high-sensitive and even the demi-sensitive into the most violent cramps of the arms, legs and spine. Since they can be immediately cured at will in the same manner as they were voluntarily created, namely, by nemetic treatment, so I may assert that my investigations have given a satisfactory explanation of this kind of cramps, in so far as such an explanation of a vital process of this nature is possible.

§ 88. Severity of strain.—The muscles are terribly strained in cramp. I often saw Miss Reichel striking her arms and hands with such force against the walls, that I thought they must be crushed, at a time when she was so suffocated during breast and neck cramps as to turn blue ; opisthotonus bent her back upwards, so that only her head and heels touched the bed, and she tore her face cruelly with her hands. I had nothing to say, and the physicians looked on, not knowing what to do. I saw Miss Sturmann in similar furious cramps. She would have bitten her own arm to pieces had not Count Szapary, a very strong man, been present, and held her so that she could not injure herself. I saw Miss Atzmannsdorfer almost daily in tonic and clonic cramps, with opisthotonus, wherein the strain of the muscles was horrible. The worst case was that of Miss Winter, who, as I have already stated, beat the strongest men and threw them down, so that everybody

in Graetz was afraid of her when she was in her fits of somnambulism and cramp.

§ 89. Prevention of cramps.—The phenomena of cramp were the most instructive in Miss Beyer. When she was attacked with it, she took hold of my hands, so that the touch would be beneficial to her by its nemetic influence. While she struggled with tetanus, she grasped my arms from time to time and shut her hands upon them with all her force. Every such an exertion of strength did her good, stopped her tears, and relieved and arrested her cramps. It often happened that during somnambulism, accompanied by cramp, she would beg permission to press me, and did it then with all her might. Every such voluntary exertion relieved her for a time from the involuntary strain of cramp; there was always an odic discharge which took the place of the cramp. Miss Beyer was present at a table-tipping soiree, which, as might have been foreseen, exercised a strong influence on her. She took the mixed odic influence received from the table home with her, and that night she became somnambulic. At midnight she awoke and found herself in her night dress, trying to lift the largest and heaviest chest in her room. At other times, when she was neither somnambulic nor attacked by cramp, she would be restless, sleepless, she could not breathe freely enough, her heart seemed oppressed and timid, she wept involuntarily, and she was evidently in the condition which precedes cramp, and in which sensitives say that they are full of cramps—a condition of soretic overloading of the brain. At such times Miss Beyer felt an irresistible desire to exercise her strength

in some manner. She would then seize the heaviest boxes in the house and lift them up ; she would put herself in a doorway and push with all her might against the opposite posts ; she would challenge men to wrestle, and notwithstanding her small size she would throw down the strongest. After that she felt well, the feeling of oppression passed away, the weeping ceased, her heart was light, and she became weak as in ordinary times. She always fell into this extraordinary condition during full moon, that is at the period when positive od is much accumulated in our country. This positive od, by its influence on her brain, led her to the verge of cramp, that is, of an involuntary exertion of strength, which she prevented by a voluntary exertion suggested by instinct.

Nothing could show more beautifully that *cramps consist in a superabundant accumulation of power in the brain*, which power is poured over the muscles, particularly those of the extremities. The brain acts in this matter like a wound-up watch-spring.

During their cramps, the somnambules, who had had some experience, often requested that no influence should be exercised on them from without, and that their paroxysms should be left to exhaust themselves in their natural course. Thus spoke Misses Reichel, Sturmann, Girtler, Krueger, Atzmannsdorfer and Ky-nast. Miss Reichel protested most urgently against all influence with magnets, because the cramps, instead of being bettered, were made to last longer ; and afterwards Miss Zinkel spoke to the same effect. I have often shown that the magnet, as a mass of iron, is od-positive, and therefore is not opposed to negative influences, but operates to excite cramps ; and for this

reason many somnambulists dislike it. Nevertheless I have noticed, under unequivocal circumstances, that not only cramps brought on voluntarily by soretic treatment may be cured by nemetic downward passes, extending over the whole body, but that severe attacks of natural cramps have a remedy in downward passes, managed with prudence, as may be understood from the theory hitherto set forth.

I first proved this fact with Miss Krueger. While somnambulic she has fallen into severe cramps. I gave her no passes, but seized her unlike hands in mine, and placed my unlike toes under hers. I soon saw the spasms relax, her muscles became soft, the cramps were allayed, and in less than a quarter of an hour, complete rest was restored. I often applied this knowledge upon Miss Atzmannsdorfer usually when she fell into cramps, I took her hands in mine, influenced her thus nemetically and soon all was well again. I once saw Mrs. Martha Leopolder, while in a large company, attacked by cramps of the arms and breast. I took hold of her hands and in two or three minutes she was cured. Miss Beyer knowing from much experience the influence of my hands to cure cramps, when she was attacked by them, grasped my fingers and held their points in the points of hers. The influence to cure the cramps was strong in proportion to my strength and vigor: and thus when I had tired myself with a long walk, I could not cure her so soon, as when I felt fresh and active. I cured Miss Zinkel of all kinds of cramps innumerable times in the same way. But in all these cases it was necessary that the hands should be grasped in the right manner, inside to inside, crossing downwards, with the finger-

points projecting, to prevent any soretic influence. Often the speediest relief is obtained by grasping the toes with the unlike fingers. If I used passes in such cases, the influence was always perceptibly weaker. The causes of this may be easily explained. Downward passes operate nemetically, it is true, upon all descending nerves, but they also meet a multitude of ascending cutaneous nerves, especially if not made carefully over the inner side of the arm, and thus they may exercise a soretic influence. The result is that the cramp-haling effect on one side is spoiled by the cramp-exciting influence on the other. In this way it is, that patients in a very susceptible condition cannot be cured of cramps by passes, but must be left to themselves. I tried with passes to cure Miss Atzmannsdorfer and Beyer of cramps, at the distance of a step and more. The effect was good, and relieved the cramps ; but if after making the passes, I went backwards, even with my arms bent sideways, Miss Beyer always shuddered ; and single upward pass made at a distance of two steps threw her into all of the scarcely arrested cramps.

§ 90. Summary.—From all this it appears clearly that soretic and nemetic influences are universally the cause and cure of cramps, and consequently that the contractions and extensions of the muscles in cramp are entirely dependent on the upward and downward streams of *od* in them.

I reviewing the relations of the senses in somnambulism and the accompanying cramp we find that the senses sometimes remain in full activity, sometimes are partly and sometimes entirely inactive ; that at

times some of the senses are active and others are not ; that the circumstances determining these grades of activity are yet far from being understood ; that the place of the inactive organs of sense is sometimes supplied by other means of perception which carry similar impressions to the mind ; that the impressions are only similar and not the same in kind with those furnished through the organs of ordinary sense ; that the new faculty of perception has the quality, previously unknown, of seeing through matter opaque to light, and finally that in this way, the inside of organic substances and even of the human body may be perceived.



CHAPTER IX.

THE NERVES IN SOMNAMBULISM.

§ 91. No two cases of somnambulism alike.—The relations of the nerves in somnambulism offer a great, an immeasurable field for physiology, over which I have been able only to take a glance. I have been so busy with the main principles and the physical relations of od, that I must leave this matter for my successors: and my remarks in this chapter are based merely on incidental observations which have fallen into my way, without any set examination.

If we watch the condition of somnambulism through its course from beginning to end, we often have occasion to notice that it is not always the same, that it has different qualities in different individuals and in the same individual at different times, and that it, sometimes takes the appearance of phases, even in the course of one fit. I saw Miss Girtler in ordinary somnambulism with her eyes closed and then with them open, her conduct being entirely different in the two conditions; and then I saw in the state called “half awake.” I observed similar changing conditions in Mrs. Lederer, who sometimes had her eyes open and yet could not see.

§ 92. **Cases of catalepsy.**—Misses Rupp, Reichel, and Sturmann, often became cataleptic in my presence ; and catalepsy is only a modified form of somnambulism. Miss Nowotny remained for hours in catalepsy, falling during its continuance into cramps which could be cured by downward passes without changing the condition of catalepsy. Friedrich Weidlich, while cataleptic, suffered for weeks with cramps. Mrs. Kienesberger fell into a similar condition with painful visions in which she heard everything going on about her, and yet lay for days unable to give the slightest sign of life. Mr. Weidlich also had such fits occasionally. Miss Winter in some attacks had her eyes open and saw with them ; in others her eyes were closed, but her hearing was good, and while she lay motionless she heard her parents weeping over her supposed death and speaking of her burial. Miss Atzmannsdorfer became cataleptic only in quiet somnambulism with closed eyes, but she had various intermediate conditions of deep and half-awake sleep. I never saw Miss Beyer in catalepsy ; her conditions alternated only between quiet somnambulism with closed eyes, and cramps. I shall not examine this difference further : but I may add that I never saw two cases of somnambulism precisely alike. This variety shows that comprehensive studies are necessary for a clear understanding of the various nervous conditions in which somnambulism has its origin.

§ 93. **Influence of the two nervous systems.**—To obtain a greater clearness of ideas, it will be necessary, first of all, to separate the great ones of phenomena into two classes, one dependent on the sympa-

thetic nerves and the other on the cerebro-spinal system. [Note for the general reader : There are two nervous system in the human body ; one called the cerebro-spinal, consisting of the brain, spinal-marrow and the nerves running from them ; the other the sympathetic, which is only slightly connected with the brain, and has its chief centres and branches in the trunk near and below the stomach. TRANS.] A strict regard for the facts, and a careful exclusion of such imaginings as are always pushing themselves into such investigations, would probably show the way how the knot is to be untied ; but much cool judgment and close observation are necessary to avoid over-estimating and under-estimating solitary phenomena. The slightest things often led me to the most important principles, while the most splendid phenomena were often mere insignificant variations of matters previously known.

When somnambulists are in deep refreshing sleep, they are corporeally quiet ; they speak but they do not act. Such is the pure nemetic condition, with negative-od predominating, for instance in cool spring sunshine, while lying with the head to the north, and after drinking negatively odified water. But when od-positive elements—such as moonshine, soretic influences, and lying with the head to the west—appear, the sleep becomes restless ; the sleepers toss themselves about, speak, get up, walk out on roofs, etc. We may therefore draw an inference from the quietude or restlessness of a somnambulist whether his sleep will have a good or evil influence upon his health.

In this manner Miss Atzmannsdorfer judged of her condition. When she fell asleep with difficulty and awoke with ease, she considered herself worse ; when

she fell asleep readily, slept soundly was not easily awakened, and when more upward passes were necessary to dispel her somnambulism, she said she was recovering.

In Miss Kynast, somnambulism alternated with swollen feet. When she had the latter, she would be free from the former for several weeks ; when her fits of abnormal somnolency came on, and they lasted from three to six weeks, she was not troubled with the swelling of the feet.

§ 94. Cold water good for cramps.—Mrs. Cecilia Bauer, Mrs. Kienesberger, Misses Girtler, Zinkel, Beyer, and others have found out that cold, fresh water, and ice are good remedies for cramps and for light attacks of somnambulism. If they use either remedy quickly before the nervous excitement has gained the upper hand, the cure is complete. Cold water and melting ice have an od-negative effect on the stomach, and exercise their abductive influence against cramps on the pneumo-gastric nerve in the stomach. When cold water is not to be had, they find relief by going out in winter into the cold air. Miss Zinkel goes out into the snow. The inhalation of cold air into the lungs also operate upon the pneumo-gastric nerve od-negatively.

§ 95. Weak acids also beneficial.—The taste of weak vegetable acids has a good effect on somnambulists, but they must be in small quantity. Sourish fruit and slightly sour salad are delicacies to the sensitive palate. But strong acids are over-exciting and injurious. Many sensitives, Mrs. Anschuetz among them, are

thrown into severe cramps by a few drops of lemon juice. The influence in this case, also, is exercised on the pneumo-gastric nerve. The brain is the od-negative pole of the longitudinal axis; and when a reaction against it is caused by a strong acid, likewise od-negative, the influence is soretic, and cramp in the stomach is the necessary consequence.

§ 96. Cramps in extremities painless.—The cramps which affect sensitives, though painful to look upon, are not always so painful as might be supposed from the severe contortions which accompany them. Indeed, many of them are entirely painless and are not even felt. When Miss Nowotny was once bringing on sleep by making passes over herself with a magnet, she lost her consciousness before laying down the magnet, and when she awoke she found the horse-shoe still in hand, fastened there with a grip so tight that she could not open her fingers, and it was a severe task for her friends to get the iron out; and yet she did not feel the slightest pain. It was the same with the tonic and clonic cramps in the feet and arms of Misses Reichel, Beyer, Atzmannsdorfer, Weigand, Rupp and many others. A similar nervous condition appeared to prevail here as in the skin, during somnambulism, where no pain was felt from any pinching or pricking.

§ 97. But painful in the trunk.—When the cramps penetrated to the viscera they first began to be felt, and now with severe pain. If they arose through the breast and neck into the brain, they became acute tortures, and some sensitives—Misses Maix, Sturmann, and Atzmannsdorfer, and Mrs. Kienesberger among

others—declared, in my presence, that they would prefer death to such suffering. It must, however, be observed that the so-called cramps in the brain, where there are no muscles, must be different from ordinary cramps, which we understand to mean involuntary contractions of the muscular fibres ; and the brain-cramps described by sensitives as accompanied by sensations as of screw-like turnings in the head brain, must mean something else.

§ 98. Nerves of sensation and motion.—After thousands of experiments and observations, we have at last arrived at that point where we are enabled to reply to some questions about the relations and participation of the nerves of sensation and motion in somnambulism. Both classes take part in it, and in an opposition similar to that between somnambulism and cramp ; in the former the sensory nerves are active ; in the latter the motor nerves. We have seen that Misses Sturmann, Nowotny, Beyer, Zinkel, Kynast, Reichel and many others, could be pinched and wounded, touched in the eyes, tried with ammonia under the nose, and with loud, sudden, unexpected noises at the ears, without their showing any sign that these things had been perceived by the senses ; all the nerves of sensation were therefore more or less downward. But those somnambulists had a clear consciousness, walked about, worked, carried burthens, and beat people ; the motor nerves were therefore unaffected and completely under the control of the will. It was the reverse in cramps. Here the motor system was attacked, was no longer free. The muscles were driven to violent and unnatural movements, and to involuntary contortions and

convulsions ; they were no longer under the control of the will. And since somnambulism usually accompanies cramp, so in the latter condition the sensory nerves are also dormant.

We find, therefore, in the affection of the nervous system, in so far as its minor branches are concerned, again the important theoretic and practical opposition which appeared between somnambulism and cramp ; that the former arises under nemetic, the latter under soretic influence ; and that, as a consequence, the nerves of sensation are attacked and deprived of their function in the nemetic condition, while the nerves of motion are attacked and thrown into involuntary and excessive contractions in the soretic condition.

§ 99. The odic thrill.—The beginning and the end of somnambulism and cramp are marked by certain sensations, which do not escape attentive observers. When sensitives are awakening from abnormal sleep, and when about to be attacked by, or relieved from, cramp, they perceive peculiar rippling thrills, which run through the body. Miss Atzmannsdorfer, when somnambulic, often said to me, "I am about to awake soon ; I feel it already in my stomach." About a minute later she would say, "Now it is in my chest;" then, "It is in my neck, and when it comes into my head I shall awake." At the end of another minute she would be awake. What is the "it" of which she spoke ? She described it as a peculiar sensation, a rippling current, commencing in the feet, when waking was near, passing slowly upwards, running through organ after organ of the body, and finally ending in the brain with waking. It resembles the sensations caused by an upward

pass, which runs through the body in the same way, and when it arrives in the head also destroys the abnormal sleep ; it moves like a wave over the recumbent body.

With this statement we may compare Miss Zinkel's explanation of her feelings when I awoke her from somnambulic sleep by upward passes. At the first pass she felt a peculiar sensation running up from her feet through her body. It was felt most strongly at the pit of the stomach, where it stopped a few seconds, and if the passes were continued, it moved forward to the chest and the neck, which it cramped together ; then it went into the head and awakening followed as quick as lightning.

These two observations made at an interval of six years exactly cover each other. In the one case the sensation was of natural spontaneous development ; in the other it was developed by upward passes. The effect wrought in the latter case by artificial means was produced in the former by nature herself ; and in both cases the influence in the depths of the nervous system was the same.

I made a similar observation with Miss Atzmannsdorfer when I first began to study these matters. I insert the experiment here, although it is irregular, and does not properly come into this place. I wished to try what influence a magnet, at her feet, would have, and placed a strong bar magnet, with its north pole turned towards her, at her feet. She felt a rippling current accompanied by a cool sensation running upwards through her feet. She described to me how it ascended through her legs ; now it reached her knee ; then over the thighs to the hips, making the abdomen

cold as ice; through the stomach into the chest, mounting through the neck ; and she was curious to know how it would feel in her head, but she did not feel it, for when it arrived there she suddenly stopped speaking, and had sprung across into somnambulic sleep, and a very deep one. At that time I could not understand the experiment, and did not know that I should have observed the different sensations in the different feet. But the main fact forms an excellent link in this chain of phenomena, and shows how, by a nemetic agent working from below, somnambulism may be induced in a manner not otherwise observed. There was plainly here a progressive advance of somnambulism, which began in the feet from the near influence of the magnet, while the body was in the normal condition ; then taking possession of the abdomen while the chest and neck were still free ; and finally mastering the brain. How mechanical the whole process !

But I return to the direct thread of my treatise.

§ 100. **The thrill of cramp.**—Let us compare what we have just read with my notes upon the course and end of cramp. Miss Zinkel asserted that every attack of cramp passed upward from the feet towards the head. It first became painful in the abdomen, below the stomach, and afterwards in that organ, there was a painful movement—a worm-like creeping. When I placed the points of my fingers on the spot I could plainly feel this movement; it could be felt by any one. After this came stomach-ache, and when the pain became acute the wen-like swelling, described in chapter VI, followed. The evil passed upward to the breast, where it caused oppressive cramps; then into the neck,

where it choked the windpipe impeded respiration and excited keen pains. It did not go further in this sensitive, but seemed to turn about, and retreated from the neck to the breast, thence to the stomach, the abdomen, the thighs, the feet, and finally its departure through the toes was felt. This was a description of an attack of cramp in the non-somnambulic condition. She often spoke in a similar manner when I cured stomach cramps for her, either by downward light passes, or by sitting down near her so that our unlike poles came opposite to each other. In such cases she would soon say, "It is better ; it is going off ;" she felt the pain passing from the stomach downward to the thighs, and so off through the feet.

At another time the cramps began in the toes, which became cold and insensible as if asleep, but without pain. But as the influence ascended the legs, the pain began ; and from the legs it passed upwards to the stomach. When the affection had reached the body the feet were free from it ; she could not stand up and move her feet freely. When the cramps got into the breast there was a secretion of a mouthful of clear, colorless, tasteless water in the mouth, as happens in other like cases. This filling of the mouth with water was repeated eight or ten times, becoming gradually less ; it had no resemblance to vomiting, and had none of the symptoms accompanying that act. The cramp then passed downwards as gradually as it ascended, and in the same order. There was no somnambulism in this case. After the attack had passed trickling through her feet, she again became warm, very warm.

Misses Atzmannsdorfer and Krueger also felt this trickling through the feet. They confused the passage

out from the feet and up into the head with each other, as these two phenomena are often complicated with each other in reality. The end of the cramps was always accompanied by this trickling current running downwards through the legs and feet. At the same time that Miss Kraeger felt this sensation in her lower extremities she felt another similar current running through her breast and neck towards the head ; but just as she said she felt this latter current, she stopped talking suddenly—she awoke.

§ 101. The odic waves of somnambulism and cramp compared.—Somnambulism and cramp, are therefore accompanied, in their rise, progress and decline, by a wave-like, trickling movement, which moves upwards from the feet to the head or downwards from the head to the feet through the body, the course being opposite in these two abnormal states. There is a perceptible attack, a kind of physical-mechanical course, which may readily be followed and may be still further analyzed. The beginning of spontaneous somnambulic sleep has not yet been observed; such observation will probably be made hereafter, but in regard to artificial somnambulism, it is well known that downward passes are accompanied by a cool trickling through the body, soon followed by sleep. We have seen that in waking, this trickling begins in the feet, passes through the body and on reaching the head dispels the sleep, in the same way as the upward passes do. On the other hand we have seen that in cramps the affection begins at the feet, and passing through the body reaches its acme of pain in the head, and then, in disappearing passes downwards again. The wave of somnambulism falls

therefore from the head to the feet, and then rises ; while the wave of the cramp rises upwards from the feet and then falls again.

We cannot explain with complete exactness what this wave is, in what medium it moves, and in what part of the body it has its channel ; and yet when we see how all the five senses and the vital powers are affected by the odic influences, we must infer that the odic vision is not dependent on the eye, nor the odic smell on the olfactory nerve, nor the odic taste on the palate, nor the hearing of magnets and crystals on the specific nerve of the ear, but on a peculiar condition of the nervous system, with which all the senses are connected and which is the deepest foundation of our physical structure. And thus it appears from these phenomena with some show of certitude, if I have rightly comprehended them, that that wave is nothing more than a change in the odic condition of the nerves ; the change being nemetic in the beginning of somnambulism and ending of cramp ; and soretic in the ending of somnambulism and beginning of cramp.

Physiology teaches us that the seat of observation and reflection is in the forward lobes of the brain ; which are the instruments used by the spirit in the development of those faculties. When Flourens cut out the cerebrum of a dove, and Hartwig that of a dog or a cock, these animals continued to live for weeks and even months, but their condition was that of unbroken sleep. The sleep was therefore caused not by means of the removed cerebrum but by the remaining part of the brain. An odic observation which belongs here, was published by me as early as 1845 (*Dynamide Band I. Seite 199; 201,]* : I found that the odic in-

tensity was stronger in the forward part of the brain in the waking condition, and stronger in the back part of the brain in sleep: so that the activity which develops *od* is in the cerebrum during the day and in the cerebellum at night. Since we have learned in these investigations that upward passes, leading *od* into the head, dispel sleep and enliven the sensitive, while downward passes render the sensitive quiet and somnambule, we may infer that upward passes by bringing *od* to the brain render its upper and forward lobes active, and that downward passes deprive them of their functional powers—as though they were cut away—and call the lower and backward parts of the brain to exercise their function in sleep.

PART II.

SOMNAMBULISM AND CRAMP OF PSYCHOLOGICAL ORIGIN.

CHAPTER X.

INTRODUCTION.

§ 102. **Explanatory remarks.**—When I laid out the plan of this work, I determined to confine myself in it entirely to the demands of physics and physiology, and to exclude all psychical phenomena which might attempt to intrude. I believed I should succeed in keeping the two separate. I propose to examine and set forth the phenomena here in their purely objective light ; while the subjective side, which must be drawn from the consciousness of the sensitive was to be reserved for a special work of its own. But the peculiar nature of the odic phenomena where the sensitive acts at one moment as the object and the next as the subject, first as the observer and then as the observed, wipes out the dividing line so often, that it is impossible to preserve the separation, and I am compelled against my will to admit and set forth some of the psychical phenomena of sensitiveness, for the purpose of explaining and completing the physiological branch

of the subject. I say "some," for I shall here insert only so much of the psychical phenomena of sensitiveness as may be necessary to the better understanding of what has gone before, and particularly in so far as they serve to throw light on the origin of somnambulism and cramp. But I shall avoid all further investigation of the mysteries of clairvoyance, prediction, sympathy, and ecstasy. I have always said that I consider it too soon to enter upon these matters before the physical laws of od and the physiological foundation of sensitiveness are fairly established. In relation to these things therefore, about which others have written so many books, I shall confine myself to brief allusions.

§ 103. Somnambulism and cramp caused by mental excitement.—I have heretofore shown that sensitiveness is usually an inherited quality. It seems, so far as I have examined my sensitives on the point, to have been derived by all of them from their parents. But single events, causing a great intellectual activity may induce somnambulism. Thus Mrs. Leonore von Peichich became somnambulic when she had an inflammation of the brain. A case happened in Stockholm where a healthy lady, sixty years of age, companion of Countess Loewenhjelm fell upon her head and fractured her skull so that trepanning was necessary. She became somnambulic immediately. For these facts I am indebted to Berzelius and the Countess of Loewenhjelm personally. Miss Zinkel was never somnambulic, and I knew her for eight years, before any sign of somnambulism was discovered in her. But after a combination of events which happened to exer-

cise a very depressing influence on her mind, and kept her in low spirits for some time, I noticed that her sensitiveness increased extraordinarily and she was affected by the slightest excitations, which at other times would have passed unnoticed. At this period I observed occasional slight attacks of somnambulic sleep lasting from a half to a whole hour. The agreeable excitements of Sundays and holidays had the peculiar influence on Miss Atzmannsdorfer that they always made her more liable to somnambulism. The mental exhilaration of such days re-acted on her nervous condition. Similar observations have been made in clinical institutes and hospitals. Every pleasant surprise threw Miss Atzmannsdorfer into somnambulism, but if the surprise was disagreeable or accompanied with painful feelings it had the opposite influence, to prevent somnambulism and induce cramps. The general disposition of the mind in somnambulism, as I have remarked, is joyous. Friendship and love in their moderate stages, when they cause agreeable feelings, promote the somnambulic sleep. Even the little innocent offences against maiden modesty, such as unintentionally occurred in making passes, often caused sensitives to fall into somnambulism. We now draw the general inference that every increase of sensitiveness, whether temporary or permanent, and all mild agreeable mental impressions have a tendency to induce and strengthen somnambulic sleep.

The psychical influences upon cramps are still stronger. Somnambulism comes stealing over the human system, it soothes, comes with sleep, consists in sleep, and often in its lower stages, comes and goes undiscovered. Often it is called "speaking in dreams,"

which has long been somnambulism. But with cramps it is different. They announce themselves by pains, head-aches and stomach-aches, colics, general irritation, and insensible feet, and since they cannot be overlooked, are much oftener observed. I shall adduce a number of facts in which physiological effects have been produced on sensitives without any influence of physical means, but solely by psychical causes, such as ideas and feelings, the effects being precisely the same as we produced by odic treatment as heretofore explained.

CHAPTER XI.

THE INFLUENCE OF SENSUOUS IMPRESSIONS.

§ 104. **Sensitive aversion to monotony.**—By a long series of observations I have discovered that sensitives are governed by a peculiar aversion for everything which continues or is repeated with a certain uniformity. I often heard, but learned only of late to properly value, the statement that a large plain presents an unpleasant sight. When from the window of my residence I showed to a sensitive lady a wide plain, an extensive plain dotted with numerous villages, she turned away and looking in another direction, said “I cannot look at a plain ; it soon makes me sick.” Miss Karhan finds it very disagreeable to look over a large flat ; and this feeling is so strong in her that when possible she always avoids a large open square in Vienna, preferring to go through alleys rather than pass it : but when she must pass it, she never crosses it but walks around it, keeping her eyes directed towards the houses on one side. Mr. Enter and Dr. Koller spoke to the same effect ; they dislike to look at large fields, meadows, wide roads, and ponds. Miss Maix who first spoke to me on this subject in July 1844, has a similar antipathy. Miss Geraldini

avoided looking at highways, plains, and particularly level snow-fields. She and her brother Alfred Geraldini hated even to see a large out-spread cloth. Miss Martha Leopolder, looking from a balcony of my dwelling, said the extensive landscape was beautiful, but would be still more beautiful if there were not so much water ; (the whole width of the Danube being visible several miles distant.) Professor von Perzer though an artist, the painter Ranftl, Baron Sidorowicz, Mr. Leopolder, Mr. von Hauer and Miss von Unckrechtsberg all thought the sight of every large plain disagreeable. Miss Zinkel always turns her eyes away from a quiet pond, and from all similar objects. In my park, however, there is a pond which is always covered with ripples by the wind and this gives her no unpleasant feeling. I have seen persons who disliked to look at the level floor of a large hall, and even at a bare billiard table. Numerous things of this kind are found among sensitives.

§ 105. Waving grain-fields.—I was astonished to hear from Miss Zinkel that the sight of a waving grain-field, a source of great pleasure to me, was disagreeable to her. When I inquired farther, Messrs. Schuler, Enter, Leopolder, and Schiller, Mrs. Heintl and others said the same ; when Miss Beyer sees grain waving in the wind, she feels as though she were being rocked by it, and she is so much affected that she would be compelled to vomit if she did not at once turn away. Mr. Klein is affected in the same manner. Miss Geraldini and Mrs. Mueller cannot endure the sight. Baron von Perger likes to see grain waving the distance, but near to him the sight is intolerable.

§ 106. **Revolving wagon wheels.**—I often heard similar statements about the feelings caused by seeing revolving wagon wheels. Miss Geraldini, when in a very sensitive condition, complained that it was extremely unpleasant to look at the wheels of the wagon passing her house. Messrs. Leopolder, Klein, and Schuler, Misses Karhan, Zinkel, Beyer, and Martha Leopolder, Mrs. Mueller and Mrs. Heintl expressed themselves to the same effect. Before my writing desk, is a round table the pot of which revolves easily in a horizontal direction. Instead of drawers there are number of pigeon holes in the edge of it and in these pigeon holes are placed notes of my experiments with all my sensitive friends in alphabetical order. This table which turns at the slightest touch, is almost constantly in motion. When I have sensitives whom I wish to try, I give the table a twirl, and the eyes of all the demi-sensitives and high-sensitives are at once turned away. Miss Zinkel gets up and leaves as soon as the table begins to turn. Misses Bernazke, Hek, and Zinkelbaier and Professor von Perger all turn their backs to it.

§ 107. **Waterfalls.**—Does it appear reasonable that such a beautiful sight as a waterfall should displease sensitives? Miss Zinkel told me she could not comprehend how people could find delight in looking at waterfalls: the sight for her was very unpleasant; it caused warm sensation to commence in her feet and move upward through her legs, as though upward passes were being made over her, and unless she should turn away, she would soon faint. Miss Karhan says that, to look at the continual motion of waterfalls

makes her ill. Misses Leopolder and Klein and Miss Beyer feel sickish when they fix their eyes on the water flowing over a waste-weir. Mr. Schuler got sick and almost vomited when he saw the fall of the Rhine at Schaffhausen, and he had to turn away. Mrs. Heintl and Zinkelbaier would swoon if they should look long at a waterfall.

§ 108. Hopping of a caged bird.—How singular that the movements of a bird in a cage should be an object of aversion for any one! And yet Baroness von Natorp told me, in October, 1846, that she found nothing more intolerable than the continual monotonous hopping of a bird in a cage from one stick to another. This might be a mere accidental dislike and without importance. But, as it appeared to belong to the same class with the aversion for waving grain-fields, waterfalls, and revolving wheels, I made further inquiries and heard similar statements from Miss Beyer, Lady Isabella von Tessedik, Madame von Rivo, Misses Bernazke and Zinkel, Messrs. Klein, Schuler, Leopolder, von Offenheim, Schiller, Dr. Rabel, Joseph Zinkelbaier, and others. Mr. Leopolder cannot endure even to hear the continuous hopping of a caged canary bird, much less to see it. Mr. von Siemianovski undertook to oblige a friend by keeping his monkey for a short time; but the constant jumping of the animal was intolerable.

§ 109. Swing of a pendulum.—The monotonous swing of the pendulum of a clock is unpleasant to demi-sensitives, and high-sensitives. Mrs. Mueller, Baroness von Tessedik, Mr. Fichtner, Dr. Koel-

ler, Mr. Sartorius, Alois Zinkel, Messrs. Klein, Schiller. Baron von Sidorowicz, Professor Unger, Mr. von Offenheim, Misses Geraldini, Rupp, Matilda von Unckrechtsberg, Zinkelbaier, Mrs. von Hauer, Mrs. Heintl, and Mrs. Augusta von Littrow—all described the moving of the pendulum as disagreeable. Miss Zinkel dislikes to see the motion of the leaves of a book slipping through the fingers. Twirling of the thumbs, drumming with the fingers and feet, and swinging the feet when they endure for a little time, even for a minute, in the immediate vicinity of sensitives, are intolerable to them. Misses Sophia Pauer, Hek, Bernazke, Geraldini, Beyer, Rupp, Miss von Unckrechtsberg, Baroness von Tessedik, Baroness von Natorp, Mr. Mueller, Mr. Leopolder, Dr. Natterer, Dr. Machold, Professor Unger, Chevalier von Perger, Mr. Sartorius, Ambassador Steiger, Alois Zinkel, Messrs. Schuler, Klein, Girtler, and Professor Schroetter, expressed themselves as out of patience with these things; Dr. Koeller could not even bear the ticking of a watch. Mrs. Fentl, Mrs. Kienesberger, Misses Atzmannsdorfer and Zinkel complained about the painful monotony of the bell ringing on the tower of the castle Reisenberg, while they were staying with me; they would stop their ears rather than listen to it long. Miss Zinkel did not like to look at persons dancing, because of the repetition of the regular motions. Miss Karhan said such sights were intolerable to her. Mr. Fichtner finds the motions of machinery almost unendurable. Mrs. von Peichich cannot bear to listen to the rattle of plates, knives, etc., at the setting of the table or the change of courses. Misses Beyer and Zinkel cannot endure to have any one walk

to and fro before them, in a small room. I should never make an end if I should enumerate all the cases of sensitive persons more or less irritated by monotonous and repeating phenomena, the irritating influence being exercised sometimes on the stomach, sometimes on the head, and always creating a feeling like that produced by upward passes. However, let us examine a few more cases of this kind.

§ 110. Change of work.—When I visited Miss Atzmannsdorfer and found her engaged in any work, I observed that she did not continue at her work steadily like other young ladies, but that she seldom kept at one thing more than half an hour, at the end of which time she would commence something else. When I said to her that she would not finish much in this way, she replied that she could not continue long at one thing ; she must have a change. I said nothing more, but thought she had not been very well trained. Not long after this Miss von Weigelsberg complained to me that nothing caused her so much inconvenience as her inability to stick persistently at any one piece of work. When she undertook any task, she could not work at it more than an hour at a time, and then she felt an irresistible impulse to leave it and go at something else. Mrs. Joanna Anschuetz spoke to me in the same manner. Any kind of occupation soon became painful and finally intolerable. Miss Geraldini confessed to me that it required the greatest mental exertion to sustain herself in completing anything. She described the change from fondness for work to aversion as sudden and not gradual. Mr. Leopolder, as mechanic, had to do much fili but to

file long at one piece was a severe trial for him. Professors Endlicher and Unger, Dr. Diesing, and many others, who have attained great learning by long and severe studies, are counter-evidences against the unsteadiness, perhaps merely capricious, of sensitive women. Those three gentlemen, just named, confessed to me that it is by strict moral compulsion that they are enabled to stick to their work and that they feel a great desire for change of occupation, which desire often plagues them greatly. I inquired about this matter of many sensitives and always received the same reply. Mr. Constantine Delhez cannot work steadily forward at any literary task; if he cannot change he must at least stop frequently and attend to something else for a few minutes. Dr. Nied, Dr. Mielichhofer, Dr. Machold, Dr. Koeller, and Mr. Fichtner told me that they have times when they cannot finish a letter at a sitting, but must rise at least once, while writing, and look after some trifle. This impulse to constantly change occupation is very strong in Mr. Gustav Anschuetz, who cannot finish any part of a painting at one sitting, but must always make several jobs of it. Dr. Natterer, Chevalier von Perger, Baron von Oberlaender, Engineer-Major Philippi, Chevalier von Sidorowicz, Stephen, Kollar, Mr. Kratochwila, Mr. Klein, Dr. Loew, Mr. Sturm, Mr. Schueler, Mr. von Offenheim, Mr. Sartorius, Chevalier von Siemianovski, Dr. Rabel, Mrs. Heintl, Mrs. Augusta von Littrow, Martha Leopolder, Baroness von Natorp, Madame von Hauer, Misses Hek, Rupp, and Zinkelbaier—all assured me that they could not persist long in any work, and that they felt an irrepressible impulse to change their occupation. Miss Zinkel cannot

do any sedentary work without soon getting headache, and, before long, very sick. Miss Beyer, when she persists in any monotonous work, feels a heat in her head and an oppressive feeling in the stomach and brain, as if upward passes had been made over her. Ambassador Steiger can overcome the impulse to change occupation only when he feels a strong intellectual interest in the matter in hand. It is the same with Miss Beyer ; however disagreeable persistance in a task may be, she yet conquers her aversion when she expects to learn something new and useful : in such cases, she can assume an inexhaustible patience and endurance. The higher spiritual excitation in this matter overbore the lower physical one. Mr. Peichich and Dr. Pfretschner cannot read long in one volume, but must have several books about them, and change from one to another. Professor Roesner cannot hold out long at any one kind of work ; he must have a change. In the course of his writing, he must often get up and do something else, even if only to make a few scratches over a violin. This love of change follows him everywhere ; he cannot remain long in the company of his dearest friends, but must get up occasionally and seek solitude for a few minutes.

The strong impulse for change of work and burning aversion for everything that last long is therefore universal in sensitives, and renders high-sensitives incapable of steady labor.

I have often bitterly complained that just I, who have devoted myself with thorough zeal to the study of sensitiveness, am entirely wanting in the faculty of perceiving the odic sensitives. But as I wrote the last paragraph it occurred to me that it is yet well

ordered that I am not sensitive ; for if I were so, this history and tiresome task to which I have given myself exclusively for ten years of my life, would never have been completed, but would have been abandoned before a quarter of the work had been done. Only the endurance of a non-sensitive could have sufficed to creep patiently through this magnetic mesmeric labyrinth, to untangle its tanglements, and follow thread after thread of it to the daylight. We have therefore a counter-piece here from non-sensitiveness to strengthen the theory heretofore explained.

§ 111. Standing and kneeling.—In connection with “work” we must consider standing and kneeling, which require physical and mental labor. Count Charles von Coronini, Messrs. Fernolendt, Rabe, Dr. Machold, Mr. Leopolder, Baron August von Oberlaender, Dr. Diesing, Professor Schabus, Mr. von Offenheim, Dr. Mielichhofer, Dr. Pfretschner, Mr. Kratochwila, Professor Roesner, Mr. Sturm, Mr. Sartorius, Dr. Koeller, Chevalier von Sidorowicz, Mr. von Siemianowski, Dr. Natterer, Major Philippi, Professor Unger, Mr. Schuler, Dr. Loew, Mrs. Josephine Fenzl, Mrs. von Peichich, Lady von Augustin, Mrs. Mueller, Misses Bernazke, Dorfer, Zinkelbaier, Caroline Eberman, Martha Leopolder, Geraldini, Karhan, Glaser and Caroline von Oberlaender, all, cannot bear to stand or kneel for a long time. Some who dislike standing almost as much, find a great relief when they can touch some firm object, if with but a single finger : thus spoke Mr. Gustave Anschuetz, Superintendent Pauer, Professor Endlicher and Mr. Fichtner. Professor

Hass, physician to the King of Sweden, finds nothing so trying as the standing at Court ; if he can find a place to support himself on a finger, it is a great relief to him. Dr. Neid, a passionate hunter, finds only one discomfort in hunting, that he has to stand still so long ; this effects him so much that he is often near to fainting. But if he can find the least support upon which to lean, it is a great relief to him. The Swiss ambassador, Mr. Steiger, carries a cane for this cause only. The mother of Lady Sylvia von Varady could not bear to stand still, and she herself has the same aversion, but she feels much better if she can find a resting point for one of her fingers. Without such a support she gets a pain in the stomach. In the morning she can endure standing and kneeling much better than in the afternoon. Mr. Delhez can neither kneel nor stand still ; kneeling soon gives him a pain in the stomach. Miss Reichel is affected in the same way by standing. Miss Zinkel gets a stomach-ache from standing, and if she persists without finding something to lean upon, she swoons away ; the same may be said of Catharine Rupp. Lady Baroness von Tessedik and Joseph Czapek get sick at the stomach when they have to stand long. Professor Endlicher could only endure the kneeling necessary in church ceremonies when he is able to rest upon his heels. Miss Reichel belongs to a religious order, and being required to go through numerous religious exercises with kneeling, was pained so much thereby, that she was attacked by severe stomach-cramps and often almost lost her consciousness. Mrs. Kienesberger, standing too long in my dark chamber, while I was experimenting with her, fell down in a swoon, but soon after awoke ; lying

down itself being a remedy for her illness. Such falls often happened to her.

§ 112. **Music.**—The impressions made upon sensitives by music are very different according to the degree of their sensitiveness. Sensitives like other men, are ordinarily fond of harmonious tones, and even more fond than most others, because they are peculiarly susceptible and all the feelings have a greater influence upon them. I shall not dilate upon this point, but merely mention a few relations which deserve a place here.

Mrs. Kienesberger liked the piano-music, which she found in my house, but not always. It was pleasant to her when her nerves were in a quiet condition, but unpleasant when her nerves were unusually sensitive. It was the same with Miss Beyer. This however may be said also of other diseases. But a hint is supplied by another observation. Mr. Klein told me that he was a great friend of music, but it must not last more than a quarter of an hour, then it gave him the headache. Mr. Schuler spoke to the same effect. And then all music in the high notes is disagreeable to many sensitives, for example Dr. Koeller, Miss Geraldini, etc. However I found some sensitives who dislike all music, of these Mr. Leopolder is one.

§ 113. **Summary.**—If we now take a general view of all these phenomena relating to the influence of sensuous impressions, and seek for general characteristics, we do not readily find them on the surface. Where is the common bond between a broad plain, waving grain-field, revolving wheels, waterfalls, hop-

ping birds in cages, swinging pendulums, monotonous thumping, steady occupation, long standing and kneeling, and the duration of music ? The picture of a wide plain seems to be just the opposite of that of a waving grain-field, and so also the swinging of the foot as compared with standing still ; and of drumming with the fingers as compared with a lengthy piece of music, well executed. Since the influence of these things did not depend on their remoteness, but was sometimes exercised at considerable distances the cause cannot lie immediately in the odic radiation, whose power as that of a radiating principle, must be considered to decrease with the square of the distance. The cause, must then, be sought elsewhere, and it is to be found, I think, in subjective influences, which operate first, not upon the body, but upon the mind of the sensitive, and from there are sent out to the material organs. In future chapters we shall see the power exercised by mental impressions in the domain of od ; and in the phenomena just enumerated we have probably seen the lowest manifestations of this power. All these things have the common feature that they fix the attention, and excite it over and over again, but never satisfy it fairly, with one strong impression of pleasure or displeasure. The eye moves over a wide plain, and finds no resting place ; while a waving grain-field, revolving wheels, waterfalls, a hopping bird, a pendulum, and a thumb-mill begin their work anew every moment, and make no end of it, because the motion goes on uninterruptedly, and as the looker-on finds no rest, he becomes uneasy. Monotonous continuation in space as in time, without rest or the attainment of the end, is the infernal torture suffered

by Tantalus and Sysyphus. It strains the attention, like long music, long monotonous labor, long quiet standing. This strain brings on sickness, stomach-aches, head-aches, numbness of the nerves, and swoons, as we have seen ; and in some sensitives it causes such a lukewarmness as is produced by upward passes, and indeed all these results belong to the same class with those caused by weak soretic influences acting on the brain. The correctness of this statement will appear more evident hereafter.

CHAPTER XII.

INFLUENCES OF MENTAL ACTIVITY.

§ 114. **Mental exertion.**—Severe exertion of the thinking power is much less frequent than is generally believed. Modern philosophy has shown that much of that supposed by the ancients, to be mental labor, is the spontaneous association of like with like in our thoughts, proceeding without any exertion on our part. The reduction of our ideas to judgments and conclusions is done often without the least effort, and takes place frequently as a matter necessary to our nature and against our will. In those cases, however, where thinking and the laborious combination of thought for the formation of new conceptions, commence, the sensitives are strongly affected. Professor Endlicher suffered from almost constant headaches in consequence of his intellectual labors. Superintendent Pauer struggles continually with pains in the head and stomach. I was led to discover the sensitiveness of Mr. Tirka by his frequent fits of megrim. Mr. Custos Koller, when he exerts his mind, is always the victim of megrim. The same may be said of Mr. Fichtner, Dr. Natterer, Dr. Leow, Dr. Nied, Mr. von Offenheim, Mr. Kratochwila and all sensitive men who are re-

quired by their occupation to engage in much mental labor. I then put questions to Miss Girtler in somnambulism demanding some reflection, she almost lost her wits, and her condition which always ended with a flood of tears showed that she was so strongly affected that she could not endure it long. Similar questions put to Miss Nowotny caused the breaking out of clonic cramps in her arms. Mrs. Joanna Anschuetz often fell into cramps several hours after I had made visits to her and plied her with questions which set her to thinking. I have witnessed but neglected to note down many other similar cases wherein the exertion of the thinking power was always followed by cramp, the development of which was precisely similar to that observed where soretic influences are at work. If Dr. Machold, Constantine Delhez, Miss Zinkel and many others exerted themselves in the dark chamber to see odic lights which appeared faint to them, and fixed their attention for a long time on a single object, the effort caused warmth in the head, (physicians call this a flow of blood to the brain) coldness in the feet, headache, and other sensations like those produced by upward passes, and such as are felt when cramp and pains of the stomach are approaching.

One day I saw Miss Reichel fall into somnambulism. Her physician wished to use this condition to get all sorts of fortune telling from her. Among other things he asked her what had become of certain missing state bonds. This horrified me, but I could not prevent it without a quarrel with the stupid physician, who was extremely zealous to discover the thief by somnambulic clairvoyance. The sensitive, urged by him, but unable to satisfy him, sought to free herself of him by various

pretexts, and at least attempted to satisfy the demands made upon her. After every such vain attempt, she invariably had an attack of cramp. In the course of half an hour this passed away, and then the physician began again with his foolish tortures, and cerebral cramps followed. So it went through a whole afternoon ; every effort in mental labor resulting in a fit of cramp. Mr. Kollar suffered with alternating megrims and stomach aches—the former being caused by intellectual exertion. Even reading requires a mental effort more severe than sensitives are able to endure. When Mrs. Joanna Anschuetz and Miss Atzmannsdorfer were unusually sensitive they did not venture to take up a book without exposing themselves to cramps. Princess Windischgraetz could not allow herself the slightest pleasure in reading without having to suffer with cramps for it. The least reflection, the most unimportant intellectual effort induced cramps in the highly susceptible sensitives.

CHAPTER XIII.

INFLUENCES OF THE FEELINGS, AFFECTIONS AND DESIRES.

§ 115. **Love and maternal love.**—The Superintendent of my estate at this place (castle Reisenberg near Vienna,) Mr. Willvonseder, had a lively little girl, somewhat over a year old, which a sensitive young lady in my house used to go to see. She loved the child almost passionately. When she begun to hug it, a thrill ran over her body at the first kiss. This thrill appeared to start with a lukewarm sensation from the solar plexus, passing lukewarm to the ganglions in the loins, spreading out in the abdomen, then turning round running with a feeling of colness to the stomach, thence to the cerebellum, then losing itself in the whole body and finally passing out through the cheeks, finger-points and toes. The plain course of this sensation she described as somewhat painful, but she acknowledged that she had experienced a similar feeling when kissed by somebody for whom she had an affection. She thought that had the child been a couple of years older she would not have felt these sensations. These are the sensuous movements of love and maternal love, to be established and qualified by further observations, but there is evidently an odic element in them, moving according to fixed laws producing corresponding results.

This odic movement is called forth by psychological action.

I have often witnessed a sensitive woman heartily embrace and repeatedly kiss her husband, when she was to be separated from him for half a day, and then fall into violent cramps. After this had frequently happened, she had to resign herself to suppress the manifestation of the tender feelings. This lady told me that she had to be careful not to kiss her own child as heartily as she wished, for fear that she would have cramps in all her limbs. The mental action was so deep and powerful that it produced a soretic influence on the nervous system.

§ 116. Sensitive women usually virtuous.—Whatever may have been my experience in regard to the erotic movements in sensitives and somnambulists, I must yet deny the assertion, so often made, that women in this condition are more inclined than others to amorous thoughts. I have not found it so. On the contrary, I have often found a peculiar chasteness. The great majority of the sensitive misses known to me, are modest and pure. And the cause may be readily understood; it lies in the cultivation of their finer feelings, which were necessarily developed from their susceptible constitutions, and from their custom of self control in the innumerable little trials and vexations consequent upon their sensitiveness. Sensitives have a more delicate mental organization than non-sensitives, and this superior delicacy is impressed in all their feelings, thoughts, desires, and character.

§ 117. Grief.—When anything unpleasant hap-

pened to Mr. Gustav Anschuetz, he immediately felt a strong headache, which last, before it had continued long, was reflected in the body as a pain of the stomach. When Dr. Machold lost a much beloved child he felt a severe ache in the stomach, and then a difficulty in his respiration. Lady Baroness Natorp knew little of her sensitive susceptibility ; but when she was severely smitten by misfortune, somnambulism was speedily developed in her. Time, which cures all sorrow, cured hers also. Miss Krueger speedily feels the effect of grief, in her stomach, and in disturbance of the pulsation of her heart. Mrs. Joanna Anschuetz suffered from childhood up, with headaches ; but when in her seventeenth year she lost both her parents, her health was severely affected, headache changed to cramp in her stomach, back, arms and feet, and these cramps continue to afflict her to the present time. Miss Atzmannsdorfer, while living in my house, with her lively temperament, conducted herself sometimes in an impatient manner, and I showed my dissatisfaction by not visiting her for several days. This rendered her uneasy and soon brought on cramps. At another time she received a letter from her father, giving her a severe chiding. I immediately saw her grow ill, with attacks of headache and cramp, which often returned in the course of the day. Miss Nowotny had almost recovered from her daily fits of catalepsy, when unexpectedly, coldness of the feet, stomach pains, headache, heat in the head, swoons, and tetanus got the control of her. We did not know the cause of the relapse. Finally, we learned that she had received a letter with some painful news, which she took sorely to heart. This purely intellectual impression had thrown her back into the most violent cramps.

Miss Zinkel, when in a sickly condition, became so susceptible, that every little moral misfortune affected her very deeply. A slight contradiction, or only the fear that she might not have done everything that was expected of her, rendered her so uneasy that she was visited by severe fits of cramps which passed over into somnambulism.

§ 118. Mental depressions altering the odic emanations.—But the sensitives feel these subjective occurrences of their own internal condition, not in this manner only : they also feel them objectively, and in regard to this point I have collected some noteworthy observations about myself. More than once, while I was engaged in the present investigation, I was severely smitten by fate. When Miss Reichel was living in my house in 1844, I received a letter informing me of a large loss of property by the dishonesty of a friend. I said nothing to any one, but shut up the pain in my breast, and tried to bear myself so that no one should perceive what I felt. It was my custom, when I made my daily visit to Miss Reichel in the morning, to give her my hand and let her try what odic strength she could perceive in it. Its strength as she felt and described it, always accorded exactly with the course of my sleep, so that when she said I was odically weak, I had invariably passed a bad night: when she said I was odically strong I had always slept well. The correctness of her perception was established by long continued experiments. A few hours after I had received the letter with the bad news above mentioned, I went to Miss Reichel and let her feel my hand. She had felt it but a short time when she made an unusual ge-

sticulation of impatience, her (manner ordinarily being quiet and reserved) and let my hand fall. She said there was something about it such as she had never felt before. It caused a severe pain in her hand and through her whole arm, and she would have had to cry out had it lasted long. An hour later I repeated the experiment with the same result. Six various trials during the course of the day gave no different result. The next day it was the same, except that the unpleasant effect was milder. On the third day it disappeared, and at this time I had regained my natural rest. My grief, therefore, had wrought an important change in me, though I, being non-sensitive, did not feel it ; my health did not perceptibly suffer, but the sensitive felt strongly in my odic emanations what was passing in my mind during two days. The mental action therefore influenced and altered the development of od.

My fate has, unluckily, never been free from such blows. The gains which I had made by toil and care were pitilessly swept away in the most foolish manner, by the most absurd events. Thus is came that, from time to time, I was thrown into unhappy moods similar to that observed by Miss Reichel. In the following year, Miss Atzmannsdorfer repeatedly discovered a great disturbance of my odic emanations at times of mental depression, her statements being entirely accordant with those of Miss Reichel. Unfortunately, however, I have no notes in regard to Miss A.'s observations, and therefore I can give no particulars.

In 1847, Miss Zinkel came into my room, after I had been subjected to a severe vexation which still kept my soul tremulous. Scarcely had she stepped in, when she asked me whether I was ill. I was not physically,

but mentally ill, and this had so altered my odic atmosphere that she, a demi-sensitive, discovered it before coming near to me. She could not explain to me how she felt, but she said it was more unpleassant than the worst upward pass.

At another time, I had been angered just before going to the dark chamber, where Miss Zinkel was awaiting me. I had scarcely set down beside her, when she said I must be out of humor—she could feel it in my presence, which produced the same feeling in her as a south-west wind. This was an od-positive lading. My whole body was charged with od, wherein positiveness had the predominance, and streamed out in all directions.

In November, 1851, I received another painful piece of news. I endeavored in vain to conceal my grief, for, though non-sensitives observed nothing, Miss Zinkel discovered that something was wrong, immediately after entering my room. She said she felt it at a distance, and that it filled the whole room. I let her take my right hand in her left. She found me very ill, not as in physical illness, but evidently in a different way. She recognizes corporeal illness by a luke-warm and worm-like creeping sensation in her arm, not extending to the stomach. Mental excitement, however, affected the stomach immediately, and so strongly that she was not only attacked by cramp there, but also by the painful, worm-like crawling over her stomach. My passes were no longer beneficial, but poisonous, if I may so style them ; the odic emanations of my right hand were no longer cooling, but luke-warm, od-positive and pestilential. I had no remedy to cure the sensitive whom I had infected. My odic

condition continued to grow weaker through the day, and I had not recovered until the morrow.

§ 119. Moral suffering causes an od-positive disturbance of the odic equilibrium.—From this we may understand the condition of the sensitives when they feel a moral suffering ; it is a disturbance of their odic equilibrium, an abnormal excitation of odic-positiveness at the cost of its negative counterweight. And thus it becomes intelligible, why, under such circumstances, sensitives are afflicted by headache and stomachache, both effects of positive and soretic disturbances of the odic equilibrium.

In treating here of the psychical side of the odic phenomena we rub against the physical item of infection. The disorders by which I was affected passed quickly, by bare touch to other persons, not that a palpable poisonous matter was transferred into their blood, but from much finer and much deeper grounds ; because a mighty force, intimately connected with the deepest vital powers, has been disturbed ; thrown from its balance, and its whole influence on a healthy person entirely changed. Here we find infection in a higher sphere than has hitherto been dreamed of. In these appearances we recognize the cause of the immense influence exerted by moral evils on the physical organization ; we knew, indeed, the fact, because it shows itself so violently in all diseases, because it creates diseases where none were before, and even because mental afflictions, unless the causes be removed, may lead to death : but we did not understand the cause which is here brought to light and shown to be an od-positive disturbance.

§ 120. **Vexation and anger.**—Discontent and anger work more rapidly than sorrow because they are more powerful. The last cases related of my own experience really belong under this head, but as they occurred outside of the sphere of the sensitives, I have thought best to keep them separate.

Whenever Mr. Gustave Anschuetz became angry or vexed he is immediately attacked by headache and in the stomach. Mr. Leopolder is attacked by stomach-ache in such cases. The cabinet-maker Bollman has a son who inherited sensitiveness and is affected with St. Vitus dance. The two were once crossing the street when they met a fellow-scholar of the boy who described to the father the disorder caused in the school by the son, whereat the latter was so vexed that he had a fit of his convulsive dancing in the street.

Mrs. Krebs withdrew into almost exclusive loneliness ; and if she was spoken to in any manner, she became impatient. If she was bothered with many questions she grew angry and soon fell into cramp. Contradiction caused a full outbreak of cramps. Mrs. Joanna Anschuetz could be thrown into cramps at any moment by an absurd question repeated several times, as though the answer had not been understood. This makes her angry and the cramps come upon her at once, as though some upward passes had been made over her. This were the effects of questions alone. Mr. Kowats is often so busied with official duties that he cannot get home till late at night. The continuous expectation and mental strain, with which his wife awaits his return, and the numerous deceptions caused by other persons passing, gradually bring on an irri-

tated excitement, which then breaks out in violent cramps of the stomach.

Miss Atzmannsdorfer went one day from Castle Reisenberg to Vienna. There somebody spoke ill to her of me, and slandered me. Since she knew the falsehood of the charges made against me, she took my part and defended me against unjust attacks. With her lively temperament, perhaps she did this too zealously, and so she got into a quarrel and then became angry. The consequence thereof was that after her return she fell into a cramp-like fit of weeping and sobbing, which could with difficulty be cured. Swoons and cramps followed each other through the next day and night, accompanied by "sleeping" fingers and feet, and ending in somnambulism. Every strong impression of anger, care and joy speedily caused headache in Mr. Ebermann. Grief, anger and vexation affected Mr. Steiger's stomach, and brought on cramp-like movements, which are followed by peculiar attacks proceeding from the stomach, and producing cramp-like manifestations lasting sometimes twenty-four hours. These attacks are accompanied by abundant secretions of saliva ; the affection then passes to the back part of the head, where it creates a severe pain, which next moves to the forehead. Every fit of vexation and anger calls out pain of the stomach in Mr. Kollar. An insignificant insult to Miss Reichel rendered her sleepless, and then brought on cramp. Miss Beyer is always severely affected in the stomach—that is, in the solar plexus—by anger, vexation and quarreling. Her arms become heavy as if lamed, her legs refuse to bear her weight, and her head becomes hot. Then out breaks of cramp, accompanied by somnambulism, fol-

low and last till the next day. Her frequent cramps after every vexation date from a certain occasion when she fell out with a person who had previously enjoyed her high esteem, the quarrel throwing her into violent paroxysms of cramp. She is, like many sensitives, easily angered, and this always produced evil effects in her somnambulism and cramp. Anger produced in Miss Beyer that other soretic odic effect of the swelling over the stomach with the worm-like crawling in it. Miss Kienesberger was thrown into cramp by every fit of vexation or anger. When much offended, long attacks of somnambulism, with alternating cramps, follow, sometimes lasting weeks or months. Every vexation had the same influence on Miss Zinkel as soretic treatment. Any loss in her domestic affairs caused by the carelessness of the servants under her was followed by an excitation of her sensitive susceptibility, and by pain in the stomach. Once she was irritated by a refusal of her servants to obey orders, and immediately there was a pressing pain in the solar plexus, which she called a stomachache. After such a fit she could not eat for a whole day, nor sleep, and the pain allowed her no rest. It she succeeded in going to sleep, she was beset by painful dreams, which caused her to weep, and when she woke up she found herself bathed in tears, and she was so affected that these continued in an involuntary and cramp-like flow. Then came a feeling of relief, such as follows the disappearance of cramp.

§ 121. Violent excitement weakening odic perception.—A noteworthy feature of physical influence on

sensitiveness is the depressing effect often caused by violent excitement. In the last paragraph I gave an example of Miss Beyer, in whom a fit of anger caused a loss of sensibility in the upper and lower extremities. Something similar was observed in Miss Zinkel. I wished one day to arrange some new chemical preparations that I had just received, in their od-chemical order, which has been discovered by sensitives in simple substances by the touch. To my astonishment her sensations were inexact and unsteady, as I had never found them. On inquiry I learned that she had been cheated out of a gulden in a very offensive way. She was compelled to swallow her indignation at the rascality because the rascal, whom she knew, pretended to be very honest, and she could not get proof against him. This suppression of her anger had such a peculiarly intense effect on her nervous disposition that the susceptibility for od was lost for a day, and she could not distinguish substances by it. This appeared still plainer in another case. She was very angry at something that had happened in the house, and indeed, sensitives generally have irritable dispositions. Soon after this fit of anger I wished to make some experiments of feeling with her, but her perceptive power was almost gone. At the same time, she showed me that her hands were moist, clammy, and swollen, as when subjected to soretic influences, such, for instance, as holding copper in the hand, or a part-pass down the arm, stopping at the wrist. Another fit of anger, at the disobedience of a servant, rendered her almost insensible to odic sensations ; she scarcely felt my passes and hands ; her feet became insensible, and her legs heavy as lead. Anger, therefore, had an effect

like a disease, and threw the whole body into an od-positive soretic state.

§ 122. Venting anger a relief for odic illness.—It has appeared on various occasions, that, when Miss Zinkel can speak out her anger, and get an explanation or satisfaction, and thus discharge herself of her passion, more or less pain and cramp in the stomach follows, and these go away soon, or can be readily driven off by nemetic passes. In such cases, an outbreak of tears is peculiarly beneficial to her, and sometimes it completely cures the whole odic timorousness that oppresses her. But when she cannot express herself, and must swallow her wrath, the consequences are always worse for the stomach; that is, for the solar plexus, probably the whole sympathetic nerve [Reichenbach gives it the expressive name of *Bauchgehirn*, the brain of the belly], for then she might be certain of a severe cramp of the stomach, passing thence, through the pneumogastric nerve to the breast, disturbing everything with a painful, crawling motion, and rising into the neck, where it cramped the throat, and threatened suffocation. This was a progress which I had often observed in greater or less strength in high-sensitives, and which, when it entered the brain, caused the most fearful cases of opisthotonus and cramps of the spinal marrow. When I was near, the attacks were not at all dangerous; I loosened the cramps by a few nemetic passes; yes, it was enough that I placed my right side to the sensitive's left, and laid my hand on his stomach, and in less than a minute the cramps gave way and all the fearful violence of the attack was stilled. All these purely

odic phenomena are produced by mental influences alone. In one case of this kind, induced by anger, I gave Miss Zinkel some nemetic downward passes to cure a commencing cramp of the stomach. She felt the influence more strongly than usual ; my passes felt like ice passing over her, her arms were covered with goose-flesh ; but the cramps were dispelled. In these phenomena, and they cannot otherwise be conceived, there are many phases of stronger and weaker excitability, which rise and fall, above and below the ordinary average condition, according to the psychical moods, and their intensity ; such as the necessity of smothering rage, or giving free course to it, and so forth, the more minute calculations of which matters, I refer to skilful physicians, for whom a special knowledge of these things has a new interest.

§ 123. Cramps caused by fright.—Vexation and anger are moods wherein the mind is directed towards attack. Fright is a different mood, wherein the thoughts are turned towards self-protection ; and it also shows a strongly marked odic influence upon the physical organism. Miss Nather, a native of Basle, was in that city with her parents when the place was bombarded. The anxiety and destitution which she saw around her, and the bombs exploding in her house, threw her into such a fright and so shattered her nerves that she never recovered. She became somnambulic, clambered as a child about on roofs in the moonlight, and passed her whole life in struggles with cramp and attacks of nervousness. When, in May, 1844, I visited Miss Sturmann, it often happened that storms passed across the sky. Not the lightning, but

every thunder-clap, threw her into cramp and catalepsy. Once she had just taken a little board into her hand from mine, when a moderate thunder-clap brought on such cramps that it was impossible for me to take the board away, although I exerted all my strength ; but at the end of a few minutes, her cramps relaxed, and the board fell by its own weight.

On one occasion she was in somnambulism when a storm was passing. At every thunder-clap she had clonic cramps of the arms. At another time a distant firing of cannon was heard in the house, and at every shot her arms were cramped. Even any sudden noise, such as the slamming of a window-shutter or a door, caused cramps after a lapse of a few minutes. Miss Catherine Rupp became cataleptic when she heard thunder. The falling of a broom upon the floor was sufficient to induce cramp and catalepsy ; so also the slamming of a door, or an outcry, or an abrupt calling of her own name ! Since the influence was the same as when she handled copper kettles or brass mortars, or a door-lock, or an iron pump-handle, it is plain that the fright effected her in the same manner as an od-positive reaction in a soretic direction. I was often witness of similar occurrences in Miss Sturmann ; a boy bawled out in an adjoining room, and she was beset by clonic cramps and catalepsy. In her dwelling, in Ferdinand street, in Vienna, the steam-whistle of the distant locomotives on the Southern Railway, may be heard ; but I had hardly noticed the sound before the sensitive girl was in a clonic cramp and unconscious with catalepsy. Miss Reichel often stumbles, and every fall causes a fright, resulting in somnambulism and cramp.

§ 124. **By outcries.**—Mrs. Cecilia Bauer has all her life been afflicted with stomach-ache caused by innumerable little frights. I saw such a case in my own house. Misses Atzmannsdorfer and Amelia Krueger were in two different rooms, when the former had an attack of cramp, for some unknown cause, and she uttered a cry. Miss Krueger heard it, and she was overcome by cramps and somnambulism. Miss Atzmannsdorfer was for a time so sensitive to frights that every loud noise, the moving of a chair, the closing of a door, would induce cramps of her arms and legs. The first time that Miss von Weigelsberg was afflicted with cramps of the tongue, the attack was caused by the sudden view of an unexpected conflagration; after that any little fright brought it on. Mr Lippich, the regular professor [*ordinarius*] in the clonical department of the University of Vienna, was the physician of Miss Atzmannsdorfer, and was interested in her sufferings. She had a great respect and liking for him. While she was staying in my house, Lippich died unexpectedly. The news of his death, though I broke it to her gradually, struck her so violently that she fell into cramps and somnambulism. The strangeness of my dark chamber rendered Miss Winter uneasy and threw her into cramp. Miss Martha Leopolder was afflicted with megrim after every fright. Mrs. Kienesberger, under similar circumstances, suffers immediate attacks of severe head-ache, cramps and other nervous afflictions. Every fright, affecting Mr. Gustav Anschuetz, is felt by him in head and then in his stomach. A fright always gives a severe head-ache to Mrs. Ebermann; Embassador Steiger and Mr. Custos Kollar suffer stomach-ache after every fright.

Baroness Pauline von Natorp knew nothing of her sensitive condition until she was shocked by repeated severe frights. From that time forward she became a sleep-walker and suffered with cramps, and did not recover until after the lapse of years. Miss Zinkel feels every fright first in the pit of the stomach, on the left side, that is, on the left lobe of the solar plexus. This affection on the left is significant, because it indicates that the fright reacts in an od-positive direction, where it attacks. Thence the cramping movements spread upwards to the breast and towards the head, thence to the arms and feet, and finally to the toes and finger-points, which last are afflicted with a peculiar pain.

At another time a bell was rung very near to Miss Zinkel's ear, and as this was done rather violently it was sufficient to give her such a fright that she was soon beset with stomach cramps and then with breast cramps. Some years later, when her sensitiveness had increased to somnambulism, her impressibility for fright was so great that she fell into clonic cramps when the iron of her stove snapped at cooling; yes, it sometimes happened that when she was sitting near me, she was startled by an unexpected movement of my hand, by an accidental tone of a word in conversation, and soon she was the victim of general cramps, which usually terminated in somnambulism.

§ 125. Odic perception weakened by fright.—A quick awakening out of common sleep may be reckoned among the feelings of fright, if only in the grade of surprise. In Mrs. Kienesberger this was sufficient to bring cramps upon her. To wake her quickly was to awaken her sufferings also. I have already stated in

this chapter how Miss Zinkel by anger had lost her odic susceptibility for a short time: and now I will give a fact to go alongside of that. Miss Zinkel was in my dark chamber buried with experiments relating to the odic light. Timid as she is, she was much frightened by the fall of a bar-magnet to the ground. Up to this time she had seen the odic light very well; but after that she was od-blind, and saw no more flames than I did. This lasted about a minute; then her faculty of vision returned to her again. The excitement had neutralized her sensitiveness, for some moments, in an unexplained manner. There are, therefore, conditions caused by mental excitement in which the feeling as well as the vision of sensitives for od, is destroyed.

§ 126. Cramp caused by jealousy.—This scourge of human society plays its mean part also among sensitives. Of many examples which I have witnessed I can give only one here. Miss Beyer, who has a deep character, had a bitter jealousy in regard to a love affair. She told me that the first developments of her cramps was occasioned by the unfaithfulness of a lover, which affected her so severely that when she made the discovery she fell into the most painful cramps. These moderated after some time, but broke out anew with every new mental storm, and continue to afflict her to the present day.

§ 127. By laughing.—As often as Mrs. Kienesberger laughed violently she could be certain of an attack of cramp. The same cause always produced the same effect in Miss Reichel. Miss Zinkel, after a hearty

laugh, gets cramps in the stomach. Once, while laughing violently, I saw her attacked by cramps in the calves of the legs. At another time I saw a lively, healthy laugh pass over into a frightful laughing cramp, wherein, though suffering severe pain, she had to laugh on automatically, until I succeeded, by downward passes, in subduing it. It is well known that laughing cramps are frequent among sensitives. An instructive case happened with Miss Atzmannsdorfer. She lay a-bed in somnambulism and was lively and talkative as usual. She told me many amusing incidents in her life, and made many gesticulations and laughed heartily. In the midst of this lively scene I saw her become serious, the word died on her lip, she lay down on her side and in reply to my question she answered only that she feared a cramp in her throat. After the lapse of three minutes, cramps had broken out in her arms, feet, back, body and neck. I made downward passes over, but a painful quarter of an hour passed away before I became master of the cramps. A deep somnambulic sleep then followed and lasted several hours. The only cause of this attack was her laughing and excitement in somnambulism. She knew well from experience what the result would be. At another time I shall return to this beautifully regular development, which is seldom seen in its entire course.

§ 128. By joy.—Sensitive persons are not even permitted to enjoy, undisturbed, a pleasant surprise. Miss Zinkel received a letter informing her unexpectedly, of a very agreeable piece of news. Immediately afterward, she was attacked by a severe stomach-ache, such as she had often had on previous occasions when she

had received good news. Another time she was present on Christmas eve, when a number of presents were made to some children. She took such a lively interest in the joy of the little ones, that she soon afterward fell into cramp and somnambulism. Once upon a time she heard some news which gave her great joy, and she was then immediately attacked by cramp, which did not attack her simultaneously in all her limbs, as cramps usually do, but only in the left leg, from the hip joint to the toes, which last were distorted. This points to the od-positive, soretic influence of mental excitements upon the organic functions, and is a delicate hint in confirmation of the views heretofore expressed. Misses Reichel, Atzmannsdorfer, Maix, Sturmann and others also told me of cases wherein joyous emotions brought on cramps.

§ 129. **By surprise.**—When I visited Miss Zinkel, on her sick bed, in her most susceptible period, it often happened that her whole body was attacked by cramps. It often happened, that when she had passed the whole night without cramps, and I came to her bed in the morning, and greeted her, she forthwith was beset by cramps in her breast and neck, with opisthotonus, which changed to somnambulism. The only cause of these attacks was the lively and not unpleasant emotion called forth by my entrance into the room. Miss Beyer was afflicted in the same manner when she was in her most sensitive periods. While she was going through the streets, she would often fall down suddenly as if she were epileptic, which she was not. The mere surprise given her by the unexpected sight of a friend, or by the rapid approach of some

one toward her, sufficed to fill her body with cramps. She visited me first in the country, and found there a large black dog not far from my dwelling. The sight of him threw her into cramps, in which she fell down, and then became somnambule. But the dog was only of cast iron.

§ 130. By mental excitement.—Mrs. Kienesberger loves the theatre, particularly tragedy. But when she ventures to give herself up to this enjoyment, she has to atone for it bitterly. When she gets home after the play, she has cramp-attacks severe and lasting in proportion to the liveliness of the emotions excited by the performance. Miss Zinkel had fears for the safety of an absent lady. One day when she was in a very susceptible condition, she was speaking to me of this person. While speaking with emotion, she fell into somnambulism. I supposed this to be accidental, paid no attention, and staid with her till she waked up. The conversation again turned upon the same person and she again became somnambulic. When she soon again recovered to waking consciousness, I led the conversation, a third time, upon that person, and somnambulism mastered her again. The condition of this sleep was such that symptoms threatening cramps were seen at every moment.

§ 131. By emotions of memory.—That simple pictures of fancy, recollections, impressions of pleasure and displeasure, in healthy somnambulism as well as in the ordinary consciousness, should so affect the sensitives, susceptibility as to produce cramps and similar conditions would scarcely be credible, if there were not

facts to prove it. Miss Zinkel knows a person who has treated her in a very ungrateful manner, and whom she bitterly detests. Whenever I unexpectedly mentioned his name, she felt attacks of pain and cramp in the stomach in less than half a minute. It happened to her, that somebody enquired about relatives with whom she was not on a friendly footing, and immediately she had a cramp in the stomach. Once she saw a child in great danger ; she related the circumstance to me a year later; and the mere recollection affected her so much that she broke out into cramps, in her breast, arms, and legs, with opisthotonus in her whole back. In times of such a susceptible state of health, it was necessary that every word used in conversation with her should be weighed, lest a careless expression should call forth cramps and somnambulism, which would break out so violently that while lying on the floor she would move about convulsively and make the bystanders fear that she was about to die of suffocation.

§ 132. By emotions in dreams.—A case almost comic in its nature, is sufficiently characteristic to deserve a place here. Miss Zinkel had charge of the sale of the ripe fruit of an orchard and was busied in having it guarded, gathered, measured and taken to market. While thus occupied she dreamed one night, while in ordinary sleep, that she had gone out into the orchard and caught a thief there stealing the fruit. She went up to him, upbraided him, and in her anger became so much excited, that while dreaming she felt the approach of stomach-ache, and being awakened by it, she felt a crawling moving and a swelling over her stomach, and

cramp-like sensations in all her limbs. Such cases are not rare with her ; they occur frequently.

§ 133. Summary.—All these influences produced by the intellectual movements of love, grief, vexation, anger, fright, jealousy, laughing, joy, surprise, emotion, and the imagination, agree to a wonderful extent in causing in low, demi and high sensitives, the same effects which are produced by soretic-odic treatment, passes towards the head, lying with the head towards the west and south, grasping of od-positive substances with the left hand, such effects namely as head-aches, stomach-aches, swoons, cramps and the phenomena of this class ; and these effects are produced in the same manner as by the generators of positive-od.

And thus we arrive at the following conclusions in regard to the influences of the sensuous impressions, mental excitement, and the feelings, affections and desires heretofore treated of :—

All these psychical movements, which, according to physiological views, are supposed to proceed outwards from the nervous centre, when viewed on the odic side, occur and express themselves in the conceptions and actions of the sensitives in the same manner as when soretic and od-positive influences are brought to bear on the brain. Inferring, that like effects under like circumstances must have had like causes, we have every reason to assume that all these intellectual movements were accompanied by an accumulation of positive od in the brain ; probably so far as matter could participate in them, were composed immediately of it. A development of positive od in the brain then accompanies and is

caused by all these mental actions, and the activity of the human mind appears to be immediately connected with odic movements: and the od which we have hitherto seen active in the physical world steps forward now also as a fellow-laborer in the workshop of thought.



CHAPTER XI.

MENTAL EXALTATION IN SOMNAMBULISM.

§ 134. Odic perception acute as sensitiveness is high.
—I have shown and proved by a thousand facts that sensitives are provided in their sensual organs with faculties entirely wanting in non-sensitives. They see, feel, hear, taste, smell, perceive through muscular and vital senses, and in this way receive sensuous impressions entirely denied to others, as light and color are denied to the blind. I have further shown that these perceptive faculties become more acute as the sensitiveness rises, and that the higher a man's sensitive susceptibility, the more numerous and plain his perception of odic phenomena, so that a low sensitive may be compared to a short-sighted person, and a high sensitive to a long-sighted one ; where the one sees only a gray mist or a light smoke, the other distinguishes a clear light, an odic flame and the colors of the rainbow. Should not this perceptive power also increase with the exaltation of sensitiveness ? Should not the condition of somnambulism and cramps develop still higher powers of perception ? After what we know already this would no longer be wonderful, but

on the contrary it would be surprising, and violative of logical reasoning if this were not the case. He who has studied the physical and psychical operations of *od* must foresee, with tolerable confidence, and must expect that the phenomena in somnambulism are not merely physical, but that they also ascend psychically higher than in the ordinary waking consciousness of the sensitive. If, therefore, there be in somnambulism some phenomena which people call miracles, because their causes are not clearly understood, we must not be surprised or offended if the physicist is sober and cold-blooded but cautious and thoughtful. Berzelius says: "The chain of knowledge always ends in something incomprehensible." Explanation and comprehension can nowhere enter the infinite; every investigation must terminate when it reaches the incomprehensible. Care must be taken not to mix the limits of the comprehensible with those of the incomprehensible, and to establish the facts precisely where the one ends and the other begins. I shall now go this road, and lead the reader along these limits for a short time.

§ 135. **Somnambulic prophecy.**—In the first place let us hear two cases, the facts of which I myself witnessed, and which I will set down here one after another. Miss Nowotny had regularly, every evening, an attack of catalepsy, to which somnambulism sometimes joined itself. In such a condition she told me, on the 19th of March, that her cataleptic fits would continue five weeks longer, and that she would have the last one on the 27th of April; till then they would grow shorter every day, and on the last day the fit would last only four minutes; and then she would be free

from them forever. Then she added that the headache, with which she had been uninterruptedlly afflicted for eight full years, would continue beyond that day, but would end on the 8th of May, and then she would first have the pleasure of feeling herself free from pain. In fact, I soon saw, in the daily decrease of the duration of the attacks, the fulfilment of the prediction, for every day they became shorter. I had kept the 27th of April in my mind, and on that evening I was at her house early. The attack commenced and I looked at the minute hand of my watch. When four minutes had passed the catalepsy and cramps ended and she waked up. I went the next and the following days, but the attacks did not come. Nevertheless the headache remained. I continued to visit her daily. With deep emotion I learned on the 8th of May that the headache had not visited her during the day ; and the joy over it enlivened and rendered happy the whole house. It might be said that Miss Nowotny had probably played a little comedy and duped me. But no one knowing the circumstances would have said that ; though I should still admit the validity of such an objection if this fact stood alone. But it is corroborated and confirmed by hundreds and thousands of similar cases which I have observed, and I have made special mention of this single one only because of its well-bounded clearness. In this case we have a striking proof that somnambulists, under conditions unknown to us, possess the faculty, entirely wanting in non-sensitives, of foreknowing events many weeks before their occurrence, and with a precision exact even to a minute. That was one case.

§ 136. **False somnambulic prediction.**—And now for the other. Miss Kynast had suffered for years with somnambulic attacks, and like Miss Nowotny, in these slumbers she told, always correctly, when she would have her next attack and how long it would last. These predictions were fulfilled so accurately that they came to have a common character, and everybody in her vicinity was satisfied that such a prediction was almost equivalent to a certainty. When somnambulic, she also possessed in a high degree the faculty of foretelling the phenomena of her disease. One day she came to visit me, and as I was occupied at the time she stopped among my servants, and there went into the somnambulic sleep. The cook now got hold of her, and put all sorts of questions to her. Among other things she asked about a trip which she (the cook) intended to make to Prague, whether it would be a fortunate one and uninterrupted by accidents. The sleeper said that all would go well, save that an accident would happen at the bridge of Prague, but she would escape uninjured. She then asked further about the fate of the child of one of the superintendents of my estate—which child was very ill—whether it would recover or die of that illness, and whether she could not tell something that would cure it. The somnambulist replied that she saw the child (the superintendent's dwelling was about 800 yards from Castle Reisenberg, and separated from it by a park) ; it was dangerously ill, but it would recover ; and then she prescribed how it should be treated. It so happened that the cook had not the remotest idea of going to Prague, and so far from the superintendent's child being ill, he did not even have a child and there was

not a child about the place. The somnambulist had thus been entrapped by the ideas which the questioner suggested ; she had blindly believed and had made prophecies which were not only untrue, but for which there was no foundation. She had merely dreamed, and spoken her nonsense out as many persons do every night.

In both these cases, to which I shall hereafter add some others, we have *astonishing and exact fore-knowledge* side by side with *absurd baseless guesses* both in somnambulic sleep ; the true predictions being made by the somnambulist about herself ; the false ones about other people.

Somnambulic sleep is not therefore in its very nature a condition, wherein the human mind is able to foreknow the future ; and all assertions to this effect and extent, are evidently false. Nevertheless there are special conditions of somnambulism wherein the human mind can possess a foreknowledge wanting to persons not somnambulic. Experience has not yet learned to distinguish this latter class of conditions, and between this and the other class lies the dividing line of the comprehensible and the incomprehensible.

§ 137. Od generated by muscular force.—Let us now consider some cases where the mental exaltation of sensitive persons goes still further and extends beyond the limits of our globe.

Mr. Dubois Reymond has proved by some beautiful experiments that electricity is generated when our muscular force is exerted and whenever I have found that od is generated at the same time. If I placed the end of a porcelain wand in Miss Beyer's left hand and

held the other end in my right, after a few minutes she felt only the common coolness of unlike od. But if I grasped the wand tightly with my hand the coolness changed to cold, which shivered through her whole frame: and if I took the wand in my left hand, the ordinary lukewarmness of the like od changed to a heat when I exerted myself by grasping the wand with all my force. The same sensations were perceived by a number of other sensitives. These facts, observed on many different occasions, and in many different ways furnished the proof that the exertion of muscular power is accompanied by a development of od.

If instead of holding a wand between myself and the sensitive, I stretched out my empty hands towards him at a distance of four or five steps, he felt the odic influence usually felt at that distance; but if, while thus holding out my arms and hands I put the utmost tension possible on the muscles, the sensation produced on the sensitive was entirely different. Chevalier Sidorowicz found that my right arm which at first sent out a cool stream of od towards him, sent out a cold stream when the muscles were made rigid, and besides exercised an irritating influence impelling him to strain his muscles in the same way. Misses Zinkel and Beyer spoke to the same effect. Miss Geraldini was so much affected by rigid arms held out at her that she wanted to relieve herself by gnashing her teeth. When I stretched out my left arm alone at her, it cramped up the extensor of her left hand and threw the hand open: and when I pointed my right hand at her left side, she felt the same feeling in the flexors, and the fingers were doubled in together. The tension of my muscles was involuntarily irritated by the sensitive.

With Miss Beyer the same treatment produced the same effect. When I suddenly strained to the utmost the muscles of my arms, hands and fingers pointed towards her, she immediately felt the cool odic emanations of my right hand directed at her left side become stronger and cooler than before. Though five steps distant from me she felt an almost irresistible desire to strain her muscles also, and to grasp or press something tightly, in short she felt a transfer of what was passing in my mind and body to her own. It was the same with Miss Zinkel. First I made a slight downward pass with my right hand at a distance of four steps, for the purpose of putting everything at rest. Then I stretched the same hand out towards her with a tension of all my muscles. She felt a cold sensation accompanied by an irritation impelling her to exert her strength. She felt as though she would like to have a stick of wood and beat me with it. I then pointed my left hand at her with the muscles all in tension. She said the sensation was much more disagreeable and irritating than from the other hand. Finally I pointed both arms at her at once; this irritated her so much that she felt a strong desire to assault me, but at the same time she had pain in the stomach.

§ 138. Experiment with a mirror.—I countertested this experiment by another with a looking glass. It was a large dressing mirror, and stood on rollers. I moved it into the doorway, between two rooms, so that when Mr. Klein and myself were one in room and invisible to each other in a direct line, on account of the wall, we could yet see each other in the glass,

at an angle of seventy degrees. Each stood four steps distant from the glass. When I raised my arm towards the image of Mr. Klein in the glass, he immediately felt the influence of the odic emanations, which are reflected from a mirror like light. When I strained my muscles, the sensations created by my arm became stronger, the prickling was sharper, and he became so warm that the sweat-drops collected on his forehead, though the temperature of the room was but 51° Fahrenheit. He did not, however, feel any desire to strain his own muscles. I repeated the same experiment with Miss Zinkel ; she felt the increased odic influence of my muscular exertion, reflected from the glass, but she felt no psychical impulse to imitate it.

In these experiments we can distinguish two influences: one immediately physical—namely, the odic emanation from my hands towards the sensitive, and this is also felt under the laws of odic reflection ; the other psychical, where a distinct mental operation, the voluntary exertion of muscular power, flows over into another person, a sensitive, and excites in him a similar mental operation, the will to exert the muscles, and even gives him a disposition to assault me. The act of my will, directed upon a tension of the muscles, passes over into another person, four steps distant, and excites a similar act of the will in him, his act being called forth by no motive save my volition. The physical and psychical influence are separated by the use of the mirror ; the physical, the odic emanation, the radiation, is reflected according to its laws ; but the spiritual principle is not reflected, and therefore is of another nature. Here we find a sharp line separating the comprehensible from the incomprehensible.

I look upon the preceding facts as introductory to the following higher phenomena of the psychical class :

§ 139. Dr. Blass' control over Miss Beyer.—When I first saw Miss Anna Beyer, in January, 1848, in the house of Dr. Blass; in Vienna, she was somnambulic. Professor Ragsky was the only other person present. When the physician spoke to her, she replied to him ; but when I or Dr. Ragsky spoke to her, she did not answer, and apparently did not hear, even when I spoke in the palm of her hand. In this condition of so-styled "connection" with her physician, she was by no means insensible to odic reactions, upward passes, like paintings etc., with which I tried her. I may incidentally remark that, since she is a very obliging and affable girl in her normal state, any suspicion that she knowingly and purposely gave me no answer, would be out of place. The important point in this matter was the statement of Dr. Blass that the girl, in her sleep, obeyed his will in all things, and even when he exercised his volition in silence. To show the correctness of this assertion, he requested us to put his power over her to the test. We spoke alternately French and Latin, so that she should not, by any possibility, understand ; for she was the daughter of a poor potter from Bohemia, and she had never entered a house where any tongue save German or Bohemian was spoken : and therefore there was no ground to suppose that she understood either of the languages used by us. I proposed that he should silently order her to demand a glass of water and drink it. Dr. Ragsky and myself placed ourselves on opposite sides of the physician

and the somnambulist, and watched them attentively. The former stood with folded arms, all of us being silent. In half a minute I saw the girl move her lips as if with thirst; she now asked for a glass of water, and when it was given to her, she drank. It was then proposed that the physician should dispose her to get up from her chair and lie down on a sofa near at hand. Not a German word was spoken, and we waited in silence for the result. She soon arose, unsteadily, as in sleep, went with closed eyes to the sofa, and laid down upon it. Several such tasks were proposed, and all were successfully performed. In the meantime, I tried by efforts of my will to govern her, but she did not obey me, as she had previously given me no answer. Finally, the physician offered to awaken her by his mere volition, without doing or saying anything to her. Her sleep was so profound that Professor Ragsky thrust needles into her hands, and pinched her severely, and poked his finger into her eye, without any manifestation of sensation from her. When Dr. Blass placed himself opposite to her, with the silent purpose to awaken her, she turned herself over upon the sofa, and said in her sleep: "I am coming" [*Ich komme schon gleich*, in the Viennese dialect]. She then sat up, sighed, rubbed her eyes, and looked at us with the air of one just awakened from a deep sleep.

§ 140. Other experiments with Miss Beyer.—Some days after, I repeated my visit to Miss Beyer and Dr. Blass. The experiment of the glass of water was repeated under the same circumstances and with the same result. At my request, he wished her to give her left hand to him, and she did so. I suggested that he

should put a pen in her hand and she should give it back to him. She carried out this silent task exactly, and I noticed an unmistakeable inward movement in her, namely, that all this was done with the co-operation of a certain soretic, od-positive influence. I then wished her to take the pen from him again, and she took it; and in this motion too, I perceived the effects of od-positive influences; the will of the physician worked positive-soretically upon her, and I observed some of the premonitory symptoms of cramp.

I wished now to know whether these influences could be exercised at a distance. Dr. Blass placed himself in the opposite corner of the room, and at my request willed that she should come to him. At first she became uneasy in her chair, then, still asleep and with closed eyes, she got up as if with difficulty and with the unsteady motion of a person half asleep, fell back upon her chair several times, and at last moved slowly across the room, evidently with much exertion, to her physician. He laid her down upon a sofa and went into another room, at my request. I wished to try whether the influence would pass through the wall, and, at the same time, subject the physician to an indubitable test. When he was on the other side of the wall, I suggested that he should wake her from her sleep. I soon saw the consequences of od-positive soretic influence. She turned over, moved her limbs uneasily, raised herself on the sofa, sat up, sighed, rubbed her eyes, awoke, opened her eyes, evidently just awaking from a deep sleep. A week later Miss Beyer was in my house, and Dr. Blass was with us. I requested him to wake her from somnambulic sleep by a mere silent, unexpressed act of his volition, and she

soon awoke. I repeated the experiment again of having him will that she should want a glass of water and drink it ; and again she showed the signs of thirst, asked for water and drank it when given to her.

§ 141. The author gets control of Miss Beyer.—In the meantime I came more and more in contact with Miss Beyer. I am an old and gray headed man ; Dr. Blass is young and vigorous, of about half my number of years. The appearance and deportment of Miss Beyer showed that she was a good and virtuous girl. During our experiments I perceived that she gradually became friendly to me and the strong spiritual bond uniting her to her physician was weakened. She said my method of making passes over her was cooler and more beneficial. She now began to hear me and to answer me. I often sent for her and busied myself with her for a half a day or a whole day at a time. Finally she became irritated at her physician on account of relapses which she had attributed to him, though without reason, as I think ; but the result was her inclination for me was strengthened at the cost of him who had previously been her physician. I now tried whether I could not succeed too in awakening her by the mere exertion of my will. The first attempts all failed. When I asked her whether I should not awaken her, and she said yes, I requested her to wake, and she immediately did so. I made the same experiment with the same result on Miss Atzmannsdorfer. I went into her room and found her in somnambulic sleep. The sun shone beautifully and I wished to make some experiments with sunshine. I told her my desire and requested her to wake up and arise. Soon after I said

this I perceived some cramp-like motions, and at the end of a minute she was awake. My words had worked soretically upon her head.

The possibility of awakening Miss Beyer from somnambulic sleep, by simply ordering her to awake having been thus established, I saw in that fact the transition to a higher possibility of awakening her by an unexpressed effort of my will, as Dr. Blass had done. As I saw her attachment for me increasing I again tried to influence her by silent volition. When she was sitting, somnambulic on the sofa, I sat down in front of her, about a yard off, and willed that she should awake, myself remaining silent and motionless. I had scarcely began to exert my will before she said "Only a little longer : I am sleeping so well." She had evidently felt the influence of my will and as it was not her wish to wake up, she sought to induce me to desist from compelling her to awake. Encouraged by this, I kept up my mental effort, and within a minute she stood up awake. Afterwards she again went into the somnambulic sleep : I allowed her to sleep awhile quietly and then sat down three steps distant from her. It was in the dark chamber, perfectly darkened. When I silently willed that she should awake, she rose within a minute, sighed, rubbed her eyes, as she had done when Dr. Blass experimented with her, and awoke. Some weeks later she again went to sleep in the obscurity of the dark chamber ; and when I silently willed that she should awake, she did so and as quickly as for her physician previously. Three days later I repeated the experiment, and obtained the same result. Five days later I awakened her three times in one day in the same manner.

I considered further experiments with this sensitive as superfluous. What I had seen in the house of Dr. Blass was no longer subject to doubt about its truth or exactness ; I had proved it myself. And thus the fact was undeniably established that *by the mere exertion of the will, unaccompanied by any word or sign, a man may so work upon the mind of a somnambulic sensitive friendly to him, as to govern the actions of the latter and even to awaken her from somnambulism in which she insensible to wounds and violent irritations.*

§ 142. The somnambulist does not confound her conscientiousness with that of the operator.—It must not be overlooked that the spiritual communication between the somnambulic and the non-somnambulic person is not as has been often asserted, a kind of mental union, wherein the somnambulist changes her ideas for those of her physician and considers his mental operations as her own. This is evidently an error no matter how often such an explanation has been given. It appears by the statements of Miss Beyer that this was by no means the case. It was not her physicians purpose to drink water or to go to this or that place, but that she should do it. Neither did she comprehend it as if she supposed the physician and herself to be the same person. When she drank water in accordance with his silent order she demanded it from him ; she said "give me some water ;" "give me the glass." She distinguished therefore her personality from his, and knew that he was a separate individual. After he had taken her back to her seat when she crossed the room to him, at his silent order,

he asked her why she had come to him ; and she with a tone of wonder and reproach, said " Why, you wished it ; you called me ; you would have it so." From this it is clear that she recognized his will with a comparatively clear conscientiousness, and knowingly in obedience to that will, formed her own determinations and acted independently upon them. The mental process was perceptibly the same in Miss Atzmannsdorfer when she awoke in accordance with my wish. It was not she that wished to make odic experiments with sunshine, but she was willing to give herself for the experiments which I wished to make. There is therefore no confusion or change in the conception of personality.

This theory, then, can furnish no solution for the problem, but on the contrary presents only a darker problem than the fact itself, and would increase the obscurity rather than throw light upon it. We must not confuse and darken the unexplained problems of nature by arbitrary and baseless suppositions, but rather we should hold ourselves to a strict account of what we comprehend and of what we do not.

§ 143. The established facts of clairvoyance.—Let us now hold fast to the exact result, fresh from experience as just stated, and we perceive therein three points in regard to the power of somnambulists under certain circumstances :—

1. *They can foresee the condition of their own physical health.*

2. *When other persons direct exertions of power at them they can feel the odic influence, and can be affected thereby psychically.*

3. *They can perceive volitions of other persons though the volitions be not expressed.*

For the first point there is, as yet, no trace of an explanation ; we must accept the fact in its simple character, and record it among the hundreds of others unexplained problems in the world.

The third point is equally inexplicable to us. Like the first it is psychical in its nature ; and psychology, far from explaining its causes, elements and connection, has not yet undertaken to investigate it. So far as we see, the non-sensitives' act of volition is communicated to the somnambulist. But we know of no other means of communicating a volition save by symbols, such as the conventional ones of sounds, gestures and writing. But none of these means are here used ; not only air and darkness, but walls may separate the persons between whom the communication is passing, and yet the purpose in one brain is transferred to the other. The whole science of psychology shows nothing analogous, even in the least point, to this communication. So long as these extraordinary things are not thoroughly investigated and taken to pieces, and then philosophically studied, every theory about them must be withheld.

The second point, which holds an intermediate position between the first and third, is somewhat related to odic radiation. The stream of ordinary od flowing from the upraised arm is strongest at the point of the outstretched fingers. If then the muscles of the arm be made rigid, and the muscular power be thus exerted, the odic stream becomes stronger ; at the same time a psychological influence is felt by the sensitive accompanying the physiological occurrence ; he feels

a solicitation to exercise his muscles though he was not somnambulic, and, indeed, was only a sensitive. This first influence on the will comes from the strengthened odic emanation of the non-sensitive. A transfer of the volition takes place here, undoubtedly, contemporaneously and in connection with the transfer of the od.

A superficial glance at these matters might tempt us to consider the odic and mental emanations to be the same, and, perhaps, as differing only in degree ; and men disposed to favor materialism might adhere to this view. But near as they may be to each other, these experiments yet show their essential difference. Od, as we know, is always reflected from the glass ; its psychical companion was not. While Miss Beyer was connected with her physician by so strong a spiritual bond that she heard him alone, and not me or Professor Ragsky, while she obeyed his volitions only and not mine, she yet readily perceived my purely odic influences, and was delicately sensitive to all the reactions which I attempted by like and unlike pairings of my hands with hers, and perceived quite as strongly and just in the same way as when her physician did the same things. Among other experiments I had him to cross his hands and take hold of hers, and she found this to have a very lukewarm effect. I also had him to hold her unlike hands a short time ; at first she found the sensation pleasant, but soon she drew away when, after the equilibrium had been established, a surcharge and luke-warmness followed. In the purely odic respect, then the influence of her physician did not differ from that of other persons ; his soretic reactions were as disagreeable to the somnambulist as

mine ; and hence we may infer, that the spiritual relationship, the so-called *rappo*rt or connection, and the dark mental communication between the physician and the somnambulist, must be some place else than in od, to which it may be related as it is to mineral magnetism ; it may accompany od or not, but it always preserves its independence. The two appear together in their influences, but there is no identity in their nature.

§ 144. Some general remarks on clairvoyance.— I cannot close this chapter without saying a few words about clairvoyance generally, although I do it unwillingly, for I think the time has not yet come for a satisfactory explanation. We must divide clairvoyance into two kinds : *first*, such as is *subjective*, occupying itself with the internal, corporeal and mental condition of the somnambulist ; and *secondly*, *objective* clairvoyance, which occupies itself with the external world, or persons and things outside of the personality of the clairvoyant. Each of these two kinds must again be divided into the clairvoyance relating to the *present* and that relating to the *future*. These divisions are important, if we are to distinguish the comprehensible from the incomprehensible, the probable from the improbable, and the possible from the impossible. We have seen that subjective clairvoyance, of the present, wherein the somnambulist sees into his own body, where the eyes could not penetrate by the assistance of ordinary light, is possible according to odic laws, and finds its explanation in diodaneity. The subjective clairvoyance, of the future, wherein the somnambulists predict the changes of their diseases, is aston-

ishing and entirely inexplicable under our present knowledge of od and sensitiveness. That part of objective clairvoyance relating to the present, is partly explained by diodaneity and odic radiation. In regard to such objective clairvoyance as spreads out without limit of space or time, I have already stated that, so far as my observation goes, the prophecies of somnambulists are false and the mere vagaries of wild dreaming.

To give a little more completeness and confirmation to the truth of what I have just said, I shall add some further cases that came under my own observation. First, I shall take up the *subjective*, and then the *objective* prophecies.

§ 145. A clairvoyant prophecy by Miss Reichel.—In August, 1844, I took Miss Reichel, when extremely sensitive, to the city. There she became somnambulic, and among other sayings, foretold that she would have a violent attack of cramp that night at ten o'clock. At nine o'clock I brought her back to Castle Reisenberg, and at ten o'clock precisely, the predicted fit of cramp came upon her. This lady foretold innumerable times, with the utmost precision, when she would have her next attacks of cramp or somnambulism, and these prophecies were always so exactly fulfilled that it was the custom of all the servants in my house to ask her, in somnambulism, when she would have the next attack, so that preparations to wait upon her could be made accordingly. When she predicted an attack, the whole matter was considered as settled. She made a request that, when she had cramps, particularly opisthotonus, passes should not be made over

her with steel magnets, but that her cramp should be allowed to rage itself out ; the use of magnets, as she said, did no good, and only made the cramps last longer. This proved to be true. An attack, which should have lasted four hours, was treated with magnetic passes by her physician, and it lasted eight hours, instead of being cured. Miss Weigand used to tell every day at what time her somnambulic sleep would begin. I went several times to see her before the hour fixed, and satisfied myself that the abnormal sleep commenced precisely at the time predicted.

§ 146. Predictions by other somnambulists.—But occasionally Miss Weigand predicted what was to occur at a more distant time. She foretold more than a month in advance that she would become somnambulic on the 5th of June, 1855, and continue in that condition for three weeks uninterruptedly. I visited her during that time, and found all her predictions fulfilled. Such cases often happened with her. Miss Girtler went so far in foretelling her own condition, that she was not content with speaking, but she required her physician, Dr. Horst, to write down what she said, and when he had done it, in my presence, he had to read it to her, and then to make corrections at her dictation. All her words were verified by the subsequent events. When Miss Zinkel said one evening, in somnambulism, that she was afraid of the coming night, for she would have an attack of toothache, which would last an hour, I noticed her statement, without saying anything to any one. The next morning I inquired how she had slept. She complained that she had not slept well, for, from the time the

clock struck 12 until one, she had suffered with severe tooth-ache. At another time Miss Zinkel, while somnambulic at night, said she would have a bleeding at the nose, the next morning at ten o'clock, and it would be preceeded by great dizziness. I would relieve both greatly, she said, if at nine o'clock in the morning, I would lay some small horse-shoe magnets on her breast and back, with the poles downwards, the south pole on the right side. I said nothing to her about this.

At eight o'clock in the morning and several times later, she came to me and complained of a painful dizziness which had caused her to fall down about half an hour before. In accordance with her direction I wrapped up the magnets and applied them. Her head immediately became clear, and in less than three minutes the dizziness was gone. At ten o'clock I visited her and found her nose bleeding. On another occasion, Miss Zinkel, when in somnambulism, said she would be present at a wedding on the next Sunday, and at midnight would get sore eyes, but the soreness would be easily cured by laying parsley that had been soaked in water, upon her eyes ; and she requested me to prepare some parsley in this way for her. I said nothing of this commission and had the parsley prepared. Some days afterward, on the morning after the wedding I saw her, and while she was telling me about the festivities of the occasion, she complained that at midnight she had commenced to suffer from a soreness of the eyes, so serious that she was afraid she would lose her sight. After half an hour, the inflammation began to increase ; and when I saw her, her eyes were very red, much swollen, and had a strange expression. She could not open nor move them with-

out feeling pain behind them. I could scarcely conceal my astonishment at this mysterious phenomenon which she had so accurately predicted a week before. I then applied the parsley ; the pain ceased in a few minutes, and in two days the inflammation had entirely disappeared. Miss Sturmann, Mrs. Krebs, Mrs. Lederer, Mrs. Kienesberger, Misses Winter, Krueger, Maix, Rupp, von Seekendorf, Dorfer, Blahusch, Alois Bayer, Friedrich Weidlich and many others, all foretold the times of their future attacks, and not a single case is known to me, where such a somnambulic prophecy about the somnambulist's own state of health was not proved by the event to be exactly true. [It appears however, from the next paragraph, that somnambulists sometimes err in predicting when they will recover finally from liability to somnambulism.] When we take a general view of a thousand similar facts, we may infer, as an established principle, that *somnambulists, as a class, have an insight and a prophetic faculty within the sphere of their own subjectivity, entirely strange to us hitherto, and inexplicable in the present condition of our psychological knowledge.*

§ 147. Limits of objective clairvoyance.—And now let us examine some further examples of the objective clairvoyant prophecy, such as that recorded of Miss Kynast, when she spoke of the superintendent's child. Miss Atzmannsdorfer was living in my house, in the country, when Professor Lippich, her protector, who had brought her to me, and to whom she was warmly attached, fell sick and died, after an illness of two weeks. She was at that time extremely sensitive, and at least half the time, day and night, in somnambu-

lism. During the illness of Professor Lippich she expressed surprise that he did not come to see her every third day, as he had previously done. At last she became offended at his supposed neglect. It was plain, from this, that she did not know he was ill. I then told her that he was in bed, dangerously ill. Notwithstanding this, she did not perceive that I was concealing the news of his death, which I had received several days before. She even besought me to let her have horses to ride into the city to visit Lippich, and this after he was dead, dissected and buried. I often asked Miss Beyer, in somnambulism, about future events, and she as often put me off with the reply : "How can I know that ; nobody can know it." Miss Nowotny, who had so wonderfully and truly predicted the changes of her illness six weeks in advance, afterwards became ill by neglect, and then, for the first time, went into strongly-expressed somnambulism. She soon made predictions, which are not fit for repetition, but which proved to be the mere vagaries of dreaming. Miss Zinkel predicted correctly the course of her brief illness and the time of her recovery. She then went farther into the future, and said she would never become somnambulic again in her whole life. Since that time, however, she has been somnambulic several times, and will assuredly be so again. In the same manner Miss Girtler has often stated that, with this or that attack, her illness would end and would never return. It ended every time, but always returned again. Mrs. Krebs had been in the habit, for a long time, of predicting in somnambulism, the attacks of cramp, and these predictions invariably proved to be correct. Suddenly she discovered that the wedding

ring on her finger had been broken, probably in consequence of the violent motions in one of her attacks of cramp, and she now sank in deep reflection for several days, studying what the breaking could mean. Finally she said, very confidently, that she had seen the meaning, which was, that her husband would die, after three months, and would be buried on Corpus-Christi Day. Her husband prepared himself with prayer to meet his God : but Corpus-Christi Day came and went, and, after more than a year and a day, Mr. Krebs was still alive and as well as ever. Miss Zinkel, who predicted the changes of her own illness with wonderful precision, prescribed, unasked, various remedies for stomach-ache, and, among others, a number of small fragments of calcareous crystals, which were to be placed in a little bag and laid on the stomach. Since the strongly od-negative, sharp-pointed crystals might exercise the same influence as a right hand, I tried the prescription, but the prediction was not fulfilled ; the crystals did not cure the stomach-ache.

§ 148. Miss Weigand's celestial revelations.—On my first visit to Miss Weigand, I found her in the condition called "Eetasy" by the magnetisers. She was lying upon her back upon a bed, with her hands folded over her breast, as in prayer, surronnded by a semi-circle of persons in devotion ; they were admiring and honoring her as a saint. A large, tall man and a woman were kneeling down before her, and her physician sat at a table near by taking down every word uttered by the somnambulic dreamer, in a drawling, pathetic tone. As I entered she was just telling the man and his wife on their knees that their dear deceased child

was not in the Third, but only in the Second Heaven, whence it would soon go to the Third, and advance to the foot-stool of God. The poor couple were bathed in tears. The physician put down everything, and then took notes of a journey made by Miss Weigand to the planets Ceres and Venus, and to the Sun, the pattern of her trip looking as though it had been cut out by orthodox catholic tailors, and all that sort of nonsense. She continued to speak such stuff, mixed with absurd predictions, for more than an hour, and the grosser the foolishness, the more excited were the prayers of those present, many of whom were on their knees, with their hands raised in prayer. I have seen and heard many things of this kind, but I think what I have related is enough to support the general statement to show that, in the thirty-one more or less somnambulic persons with whom I have busied myself, I have not heard a single true prediction about matters lying outside of themselves, from any one of them. All their predictions about foreign matters were, without exception, the mere play of the ungoverned fancy. It is possible that higher powers have appeared elsewhere, but I never saw anything to convince me of their existence.

If these observations be compared with each other and with the prophetic power ascribed to somnambulists by the common people, it will be seen that the latter are far wrong. It may be said that my somnambulists were not deep enough in somnambulism ; but if not one among thirty-one was deep enough to have the supposed prophetic faculty, then that faculty must be very rare, even among somnambulists. And then, no one has given a sign by which the deepness

necessary to fortune-telling may be known. Just as I am writing this, there is much talk in Vienna about some somnambulists reported to have given astonishing statements relative to events passing in Venice, Zara and elsewhere, and which statements were confirmed almost as soon as made public. But scarcely had the supposed confirmation become known before later news came, proving the somnambulists to have been all wrong, and their good repute as wonder-workers of brief duration.

§ 149. Clairvoyant reading the thoughts of others. Another remarkable kind of clairvoyance has been observed, and I must not leave it unnoticed here; but no proof of it has ever appeared within the range of my experience. It will be best represented by the following example: Persons who interest themselves in somnambulism and the like, are not rare in the highest circles of European society. Such a gentleman sent another, a person familiar with the subject and somewhat sensitive, to Paris, to examine the state of magnetic knowledge there, particularly in the assemblies of Baron Dupotet. As he was about to start, one evening, to one of those assemblies, he received a letter from his patron. He put the letter in his pocket, intending to read it at another time. When he entered the assembly a somnambulic lady, with whom he was acquainted, addressed him thus: "Ah! you have received an interesting and important letter from —?" "Yes," he replied; "what does it say?" "I can not tell you yet; I do not see it," was the answer. The conversation was continued, and after the lapse of half

an hour, the visitor, tickled by curiosity, went to one side, opened his letter and read it. When he returned and sat down in the company, the somnambulist again addressed him and said, "I can now tell you what there is in your letter ; your patron writes to you that you shall—— ;" and she went on to state the purport of the letter very correctly. I have the report of this case from a person in whom I place much confidence ; but I tell it as I heard it, and can not vouch for it personally. Presuming, however, that it is correct, it is very instructive. So long as the gentleman did not know the contents of the letter, so long the somnambulist was also ignorant ; but from the moment that he knew it, she knew it also. She, therefore, had no way to learn its contents save through the consciousness of its possessor. Between the time when she could not discover the purport of the letter, and the time when she learned it, nothing had passed, save the reading by the gentleman, add the knowledge of it in his consciousness. She, therefore, had access to his consciousness, could seize the ideas there current, and could transfer them to her own consciousness. Our physicists, and the psychologists of the new school, will say, "this cannot be ; it is impossible." I reply : "I cannot comprehend or explain the possibility, but the fact (assuming the truth of the report), establishes the possibility. Although I cannot explain it, I would not, therefore, be justified in denying the fact. Logic does not justify the conclusion, that, because we do not understand a thing, that therefore it does not exist. We do not know what a mental conception is ; and so long as we are ignorant on such a point, so long as we do not know whether a mental conception

is of a material nature or not, whether it is the effect of a force, or a force in itself like od, whether it has or radiates out an atmosphere ; so long, in one word, as we know so very little of the nature of ideas, and of the presence of idea in our consciousness—so long, I say, as such is the case, we must not declare such a great fact as the one under consideration, to be unworthy of investigation. We are rather under obligation, our highest interest requires us, to investigate it.

§ 150. Miss Reichel frightened by an imaginary dog.—Following the course of impartial investigation, I shall here record my certain experiences, as a counter part to the statements of another, as recorded in the last paragraph. I have already told how Miss Reichel, when in deep somnambulism, did not observe that she had reached the top of the stairway, and that she raised her foot for another step. [The author has not told us anything of the kind, that I remember. TRANS.] She had, therefore, not directly observed, nor learned from my consciousness, the fact that we had reached the top of the stairway. It is, true, perhaps, her attention was not fixed on the stairs, but on her conversation, and attention is absolutely necessary to observation. In another case, however, there was no lack of attention. The same night, Miss Reichel, very deep in somnambulism, wished to go out into the beautiful moonshine. All representations and appeals to make her desist from this purpose were in vain, and she was going to have her will, even if she had to break away forcibly. Finally, it occurred to a servant to warn her against a large dog, which ran loose in the park

at night. This induced her to abandon her purpose, and go back to her bed room. But there was no dog in the park ; the only dog in front of the castle was a Florentinian molossus of cast iron. She, therefore, did not know that there was no dog about, and, notwithstanding her somnambulism, she was deceived by a very simple trick. Her perception did not reach through the park, nor into the consciousness of the lying servant. Miss Blahusch, while with me in the dark chamber, waiting for the development of her visual faculty, fell into somnambulic sleep. Mr. Leopolder was present. As he began to joke with her, she supposed him to be an unmarried man, and her conversation with him, taking its tone from that supposition, continued for some time. He not only, however, had a wife living, but one of his daughters was present in the same dark chamber ; yet the somnambulist did not perceive these facts.

§ 151. Clairvoyants not hearing when spoken to.—
When I spoke with Miss Reichel in the most susceptible condition of her somnambulism she did not understand me and I had to repeat. Once it happened that I had to repeat my words three times, and then had to change the form of the sentence before she understood me. I am not a native of Vienna but was born in Stuttgart, and therefore have not the Viennese accent ; and this slight difference between our forms of expression though we both speak tolerably pure German, made my words difficult of understanding for her. The same difficulty occurred with Miss Beyer. This lady, being a native of Bohemia speaks almost exclusively high German, [In Bohemia the people are

of Slavonic origin and when they speak German at all they usually speak only high German, whereas the German people proper ordinarily speak a vulgar dialect or *platt* peculiar to their province in addition to the high German or pure tongue. TRANS.] but yet there were times at first when in the deepest somnambulism, she could not understand me until I had repeated my words. As late as the 19th January 1848, on which day I had made vain attempts to wake her by the silent exercise of my will, she said in somnambulism with an expression of regret: "I do not know your will as I used to know that of my physician." Both these sensitives in their ordinary somnambulic state, were entirely incapable of perceiving my thoughts in my own mind ; the intervention of signs was necessary. Although Miss Beyer's attention was strongly fixed on what I was saying she did not know what it was until I had repeated it plainly. I made similar observation with Misses Girtler, Atzmannsdorfer, Krueger, Mrs. Krebs, Mrs. Lederer, and others.

§ 152. Clairvoyance not necessarily belonging to somnambulism.—Although the transfer of the idea was purely mental, in the first case, nothing similar occurred in the latter experiments ; in these, signs were always necessary to convey the ideas : but since the mental transfer of ideas in Miss Beyer in numerous cases is known to my own experience, and as I can by no possibility deny such communication, therefore speaking of differing states, we arrive at the analytical result, of which we previously had a glimpse in the wonderful prophetic power of Miss Nowotny and

Kynast, that clairvoyance does not necessarily belong to somnambulism, but that in the latter condition, something else, may appear, a higher spiritual condition which is the means of this objective clairvoyance and serves to convey ideas immediately from one mind to another.

It will be said that there are states in somnambulism, and that what does not appear in one stage, will be found in another. The possibility is not to be denied. Yet the whole range of my experience proved that persons in the lowest stage of somnambulism, Miss Zinkel for instance, when merely touched by it in nearly healthy days, had the faculty of foreseeing the course of her health for a week to come, during which week she was to be well and able to attend to her ordinary work, and to go to a ball; though deep somnambulists in the highest exaltation could not know the thoughts of other persons around them. It was then neither the height nor the depth of the somnambulism which determined the spiritual perception; a superinduced change in the somnambulic state brought this perceptive power with it, and this change was evidently one connected immediately with sensitiveness, but whose nature, cause and modes of action are entirely unknown to us.

§ 153. Acuteness of odic perception and somnambulism opposite states.—Miss Atzmannsdorfer assured me at various times that the capability of seeing the odic lights and feeling the odic sensations stands in a kind of opposition to the faculty of clairvoyance in somnambulism, and when either rose the other perceptibly sank. She considered the former as a sensuous

external feeling ; the latter as an inward conception. The faculty of external perception became more acute when she was vexed, or angry or frightened ; while the inward prophetic faculty grew stronger in proportion to the quietude of her mind and the depth of her sleep. I have shown above that vexation, anger, and fright operate od-positively and soretically upon the head like upward passes, which increase the acuteness of the vision and feeling for the odic rays. On the other hand I have proved that downward passes exercise a nemetic influence, and they not only weaken the vision for odic lights but they even destroy it entirely for a time. That downward passes have a tendency to induce sleep has been known for years. But it is in the deepest sleep that the somnambulists are the most disposed, to make predictions about the future conditions of their health and about other matters. The statements of Miss Atzmannsdorfer agree remarkably with all my varied experiences, as recorded in this work ; and on taking a general view of the facts we arrive at the following general result : as on one side the soretic transfer of od to the cerebral system exalts the odic perception and weakens the clairvoyant faculty ; so on the other side nemetic transfer of od from the brain, and to the sympathetic system, quiets mental excitement, weakness and even destroys the odic perception, induces rest and sleep, and creates, excites, and exalts the clairvoyant faculty.

Thus we have worked ourselves through the endless confusion and entanglement to a certain commanding point, whence we can with tolerable clearness overlook a larger portion of the field.

§ 154. **A blow at the materialists.**—Some learned men, belonging to the school of gross realism, including certain physiologists like Mr. Vogt, and many chemists like Mr. Liebig, who have found that common salt is decomposed and even elaborated in the human body in the same manner as those chemical processes can be conducted in the retort, and thence have drawn the illogical conclusion that man, with his body and soul, hide and hair, is nothing more than a course of a development of affinity, who look upon consciousness as a mere product of material organizations, and as a mere function of matter,—people who never made a thorough investigation into the inner nature of consciousness, of ideas and of thought, although they think themselves justified and qualified to pass the boldest judgments—these people have laid great weight, among other things, upon the English investigations in somnambulism ; and the *Allgemeine Zeitung* (of Augsburg) has published an article, entitled “An Evening with Elliotson,” from Herr Cotta, which attracted much attention and was thought to give a strong support to the materialistic views of the nature of the human soul. I think this the proper place for me to express my opinion about this matter, and about all similar cranioscopic investigations. Mr. Elliotson, of London, is undeniably deeply learned in the phenomena of somnambulism, and the world is indebted to him for much instruction. But, as the English translator of, and commentator upon, some of my writings, and as an anatomist familiar with the organs of the human head, he should not have overlooked some important points when he asked himself and others for the cause of the grimaces and gesticulations which followed

when he touched various spots on the head of a somnambulic person with his fore-finger. For, when these phenomena are examined by the light of the odic theory, they at once take an entirely different shape, and the materialistic hypotheses based upon them by Elliotson and the German physicists disappear like mist. Our skull encloses our brain, which is the instrument of our mental activity, but is this all that is to be taken into account here? Are there not other agents—the cutaneous and sub-cutaneous nerves? Is not the skull completely covered with them? There are the two nerves of the forehead, the two trochlears, the two temple-nerves, the two large ear-nerves, the two nerves behind the ears, the two small and the large nerves of the occiput—all sub-cutaneous nerves, which, with their branches, lose themselves in the skin, and run radius-like towards the vertex. They are all divided into two halves, right and left, and therefore od-positive and od-negative, and, springing from the brain, they communicate with it and pass immediately to it. Now we know from the doctrine of the odic pairings and passes, and from the strong influences exerted by touches on the head, and by passes in various directions over the hands of sensitives, that the slightest like and unlike odic treatment immediately causes violent reactions in the sensitive system. We also know that there is an immeasurable difference whether the influence of a certain limb, such as a finger, be exercised on the right or left side, whether the direction be with or against the course of the nerve, whether the influence be exerted for a long or a short time, and so on. If now Mr. Elliotson applies the point of his right fore-finger to the right side of a

sensitive's head, so that it is over the large ear-nerve, the influence will grow more painful the longer the finger be kept in its place. The influence will be of like poles re-acting soretically upon each other, and, after a little time, will be like that of a surcharge. This influence must be almost intolerable to the somnambulist. The influence will re-act obstructively on the brain, and will particularly affect the parts nearest which the nerve enters the brain, and not immediately under the finger, where probably no influence will be felt. If Mr. Elliotson now attributes the subject's expression of pain to that part of the skull covered by the finger, he is evidently in error. The emanations from his fingers, as we have seen in the course of these investigations, operate much more rapidly along the course of the nerves than directly through the skull, which is an amorphous substance, but although permeable to od, it does not conduct it so rapidly as the nervous substance. Whenever I made experiments in regard to odic influence on the head, I always found the effects produced through the sub-cutaneous nerves to be the first in time and strength. But if Mr. Elliotson moved his finger from one side of the head to the other, or used a finger of the other hand, or changed its position so that its direction was with, and not against, the course of the nerve, or placed it where it operated on two nerves at once—if he held it for a longer or shorter time, or changed it from one nerve to another, or changed its distance nearer to or further from the nerve to be affected, in every case the change would cause different sensations in the somnambulists, sometimes agreeable, sometimes disagreeable, now quick, then slow in motion, here irritat-

ing, there soothing, painful or delicious, and so on ; and when he wishes to suppose that the play of gesticulations is based on joy and sorrow, religion and wickedness, he can find abundant room for his fancy. But if it should happen that the odic influence of the finger penetrates into the skull, the discharge must be conveyed all through the brain under the law of odic conduction in continuous bodies, and operates upon all parts of it at the same time. This influence must be so complicated that no trustworthy conclusion can be drawn from it, and the only secure base for judging the effect of the change of the fingers is in the influence exerted on the sub-cutaneous nerves the moment after the position of the finger has been changed. This can teach us nothing about that part of the brain under the finger, and much less of its spiritual significance. All the extraordinary things laid before us in this way as problems of psychology, evidently rest on an improper connection of cause and effect ; their explanation is to be sought in an entirely different direction, and finds its proper solution in the laws of od. The materialism of the hylozoists cannot reap the slightest harvest in this field.



CHAPTER XV.

SOME PECULIAR MENTAL CONDITIONS OF SOMNAMBULISTS.

§ 155. **Drowsiness.**—Before somnambulic sleep begins, it is often, though not always, preceded by premonitory feelings such as we call drowsiness when they precede ordinary sleep. This ordinary drowsiness we can resist and thus put off the commencement of sleep, and the same may be said of somnambulic sleep. Thus with Miss Kruger while I was making experiments with her, I saw her struggling against the somnambulic drowsiness, and when I finished my experiments she fell asleep. I often saw Miss Zinkel beset by the same drowsiness. If I was not present, she would resist it by taking brisk exercise, going out into the fresh air, sprinkling cold water in her face, or drinking ice water. By these means she overcame the drowsiness ; but she always felt a peculiar pressure on the eyes, then a burning of the eyes, and sensations similar to those caused by light upward passes. I often saw Miss Beyer struggling to repel the somnambulic drowsiness, and by experience she became practised in the matter. But she had to do penance for driving away the sleep. It often happened and some-

times in my house, when she resisted the approaches of somnambulic sleep for the purpose of assisting in my experiments, that she was attacked some hours later, usually in the night, by cramps. The same often happened to Misses Blahusch and Sturmann, Mrs. Kienesberger and Mrs. Lederer as I saw. The phenomena were the most strongly marked in Miss Atzmannsdorfer and I had opportunities very often to observe them in her. When I visited her, my presence always, as I have previously stated, had a somniferous influence on her, but this influence was unwelcome to her, and she sought to resist it, as much as possible. The resistance caused her eyes to burn, as in Miss Zinkel, and then her eyes began to water, and tears to flow, just as when I made light upward passes over her. The usual violence which she did to the drowsiness, a kind of odic victory over herself, worked in every respect like an upward pass, and here again we see that the exertion of mental power is immediately connected with an od-positive soretic influence on the brain.

It is worthy of note that Miss Atzmannsdorfer succeeded better in resisting the somnambulic drowsiness soon after having had a somnambulic nap. When she had been awakened from such a sleep she could resist the drowsiness and keep awake longer than at other times.

§ 156. The somnambulic consciousness.—He who has never seen somnambulists rarely has a correct conception of the mental condition and outward deportment of such persons. They are both asleep and awake. How can they be both at once? The idea of

somnambulism given by Jenny Lind in the opera of "La Somnambula," going out with a lighted candle upon a roof, is far from nature. When I went with a lighted candle, at night, to see Miss Zinkel in somnambulism, her first word was an urgent request that I should put out the light, because it burnt her. I placed it behind her bed, and she was satisfied with this. Miss Reichel, when somnambulic, would bear no light, and if an attempt was made to compel her to submit to it she would scream with anger and fall into cramps. Miss Atzmannsdorfer could bear the light, but only after a conquest over her own feelings, and then I had to place it behind some piece of furniture so that its direct rays should not strike her. Miss Nowotny would not permit the light to be brought nearer than the adjoining room.

But to come back to the state of consciousness in somnambulism, some idea of it may be formed from the following observation made on Miss Dorfer. I was making some odic experiments with her ; she followed my directions and communicated the result to me. After a time I noticed her sister, who was present, smiling, and did not know why. She seeing inquiry in my eyes said. "Why, she's asleep." Now for the first time I perceived that the sensitive's eyes were closed, and that she had become somnambulic without my observing it. The conversation, the experiments, questions and answers had continued their course, and so quiet was her transition to somnambulism that I did not notice the great change in the consciousness of my assistant. Similar cases often happened in daylight and in the dark chamber with Misses Sturmann, Reichel, Atzmannsdorfer, Beyer and Kynast, so that

in the midst of the conversation it was necessary for me to look or ask "are you asleep or awake?"

§ 157. The Author's first visit to Miss Girtler.—When I made my first visit to Miss Clementine Girtler, I found her with her mother, and both came forward with studied politeness to meet me as a stranger introduced by their physician. The first visit was a brief one, but the guarded decorum of the young lady, her graceful motions, her freedom from affectation, and her regular participation in the conversation did not indicate that she was in any abnormal state, the only apparent signs of which were her closed eyes and the use of "thou" in addressing everybody. The conversation soon turned upon her health and her peculiar condition, and she spoke about it as freely and as clearly as if she had been talking of a cough or a corn. Every sentence was so reasonable, and her description of the nature of her state were so true and objectively correct that I had to guard myself every moment lest I should forget that her mind was in a sphere of consciousness far remote from ours. When I was about to go away she invited me to come again and begged pardon in the choicest terms, for the freedom which she had taken of saying "thou" to me, but it would be impossible or at least a painful compulsion for her to express herself differently :—this was one of the privileges of somnambulists. When I replied among other things how desirable it is that all men should throw off the false portions of their conventional customs and always use the upright "thou" towards each other, the expression met her full approval, and she assured me that it was the advantage

of somnambulism, that in that state the tongue speaks with the truth and sincerity of the inward thoughts and feelings ; all direct and indirect falsehoods were there sacrificed to the fresh impulses of the heart, unrestrained by conventionalities. Men, I replied, was there a higher and nobler being than in normal life ; and to this she assented with all her heart as she bade me Good Day. I describe this scene so circumstantially because it gives a correct picture of the condition of experienced somnambulists, and enables every one to correct erroneous conceptions of that state. No person ignorant of somnambulism would have believed that this was anything save trickery and deception, but Miss Girtler was really a highly interesting and deeply somnambulic sufferer, in whom at other times the strangest phenomena appeared. I passed many hours in intellectual conversation with her on other occasions but with occassional interruptions by somnambulic paroxysms wherein the usually mild maiden became furiously excited, her external conduct showing the violence of her extraordinary internal nervous disorders. At these times the great differences in the phases of somnambulism appeared in their strongest light, but I cannot dwell upon that branch of the subject in this treatise.

When in 1845, with Berzelius and Councillor Hochberger, I visited Lady Baroness Elise von Seckendorf in Carlsbad, I unintentionally threw her into somnambulism by a pass or two made over her right hand with a crystal of gypsum. Her conduct continued to be so true to the ordinary conventional rules that we all three, then knowing little of somnambulism, supposed she was merely pretending to be somnambulic,

though she was truly somnambulic in the fullest and purest measure. We saw no change, except that she "thoued" us ; her language, her pronunciation, her opinions, were the same as before ; and that so trifling a matter as a pass with a stone over a hand, without even touching it, should overturn the whole spiritual nature of a person—any such supposition appeared very absurd to all of us, though elderly men, who had seen much of life. But how many hundred similar, and even stranger cases have I seen since then !

§ 158. Thoughtfulness of Mrs. Lederer.—Mrs. Lederer was so experienced and so educated in somnambulism, wherewith she had suffered for many years, that she addressed Dr. Horst, her physician, and myself not with "thou," but with the customary and conventional "you," (*Sie*, in German). And since she was usually lively, jocose, and unaffected, she would in somnambulism ask my pardon, for, she said, liveliness was a privilege of somnambulists. Once when her physician wanted to make some experiments with odic passes on her, she got up and moved her chair to the far end of the room, away from the street. I did not understand her motive in doing this, and asked the cause. She said she did not wish the people across the street to see what was going on ; so thoughtful and prudent was she in somnambulic sleep. In her waking condition she could not have been more careful. Miss Krueger, in her somnambulic state, described to me accurately the course of her sensations when she passed, usually about mid-night, from normal to abnormal sleep. At another time, in somnambulism, she described to me, with instructive exactness, the deve-

lopment of her cramps. A third time she gave me precise information about somnambulic vision when several bodies stood before the object to be seen, as in looking into the interior of the human body. She had so clear a consciousness of her own situation, and she was so competent to maintain an intelligent conversation, that every such meeting with her was peculiarly instructive. And this happened at a time when her somnambulism was so low that she could see nothing save a red cloud before her eyes, and I had to lead her about.

§ 159. Truthfulness of Miss Zinkel.—The conduct of Miss Zinkel on one occasion shows a queer phase of somnambulism. She was conversing in that state with me when she suddenly assumed a tone of great intimacy, and said to me, "Von Reichenbach, I must tell thee something in confidence." "Well, what is it?" "I have been deceiving thee." "How?" "I have received a letter from the captain, and have concealed it from thee. He insists upon marrying me. I tell thee now that I deceive thee in the daytime, so thou mayest know it, but thou must not say anything to me when I am awake, for thou knowest it would grieve and offend me." I promised silence and kept my promise; but I must tell the secret to the reader in confidence. A wealthy captain in the Imperial army was then courting her and she was irresolute whether to accept him, and assumed that I was opposed to the match, though I said nothing either for nor against it. She had previously, when awake, told me something of the affair, but concealed the receipt of the letter. In this conduct we see a peculiar psychological puzzle, how

the sensitive was more candid and upright towards me in somnambulism than when awake, and she entered a kind of complaint before me against the waking self, forbidding me, at the same time, to raise the veil of her somnambulic confidence in the day-time. What a singular changing of two personalities in one and the same individual, and all with the consciousness of the change. She knew that when awake she was the same person ; and betrayed that other one to me ! I dare not tell her what she herself told me. She knew that when awake she would not know anything of that which she did telling me ! But how did she now that ? What an incomprehensible conscious double personality ! In a similar manner Miss Zinkel often, in somnambulism, bade me never to tell her, when awake, that she had been somnambulic. "It would pain and grieve me," she would say, and insist that I should promise silence. One day I could not resist the desire to speak to her about her somnambulism, and, indeed, it seemed to pain her to think that she had been somnambulic, a state for which she had a great dislike. But the queerest part of it occurred the next day, when she again became somnambulic. She then gave me a severe and formal lecture for having broken my promise and betrayed her abnormal condition to her when awake. I then had to make sacred asseverations that I would never do the like again.

My friends and myself often talked for hours or half-days at a time with Misses Atzmannsdorfer, Reichen, Sturmann, Krueger, Kynast, Beyer and Zinkel, when they were in somnambulic sleep ; sometimes our conversation was serious, about somnambulism ; sometimes it was jocose, turning on such questions as inter-

rest young ladies, and they would take their share in the jokes, as though they were in their natural condition. A stranger coming in would never have supposed that any person was in an abnormal state. Indeed, Miss Reichel, in somnambulism, often went from Hietzing to Vienna, attended to business there, and returned home alone through the throng of men and wagons in the capital.

From all this we perceive that somnambulists are not like normal sleepers in a dream of merely imaginative ideas, but that they form conceptions, judgments, conclusions. In this respect somnambulism is strongly distinguished from normal sleep.

§ 160. Attention in somnambulism.—It is well known that attention is absolutely necessary to the formation of sensuous conception. Thus it happened that soldiers engaged in battle have been wounded and have not been aware of it until a comrade would call their attention to the flow of blood: and we all know that when sunk in reflection a thousand things are done about us without our noticing them. This universal quality of our mind shows itself also in sensitiveness and in somnambulism. Some examples of my experience may be worthy of a place here. When several persons visited Miss Atzmannsdorfer, in somnambulism, she usually noticed no one save myself, and her conduct was such that there was reason to believe she did not perceive the others at all. But if I asked her who were with me, she would consider a little while and then reply properly. It was evident that she did not turn her attention to them until after I asked and she then first recognized their presence.

This lady, as well as Misses Reichel, Girtler, Sturmann, and others would undertake at any time to hunt me out, recognize me by feeling my person standing silent in the company, and they always succeeded.

In the beginning, before I knew much of these matters, I took up a little magnet in the dark chamber and held it to my breast expecting that Miss Atzmannsdorfer would notice it and speak of it. But she did not, and after a long delay I expressed my astonishment. I did not then know that I had weakened its light by placing it near my breast; my stomach, my metallic buttons, my hands and fingers, all stronger than the magnet, that unless her attention had been particularly drawn to the little magnet she would never have observed it. To satisfy my doubts I immediately placed my hand on a single-leaved horse shoe magnet with its armature on, and this she perceived by its light. Many other remarkable instances might be given to show that as in the normal consciousness, so also in somnambulism and to a still greater extent attention is necessary to perception. But when they do give attention they often penetrate to a depth and distance that astonish us.

§ 161. Awaking from somnambulism.—Here belong the phenomena and the manner of awaking from somnambulism, wherein the high degree of clearness in the sleepers consciousness becomes, if possible, still more evident.

At first I thought nothing more singular or comical than that the somnambulist should say that she wished to awake, and would request me to wake her. Miss Reichel often made such requests of me and my

friends. And when the person, for instance my daughter Ottone, did not know how to go to work, there was no difficulty on that score, for Miss Reichel would at once explain to her precisely what she should do to effect the awakening. "Go to yonder drawer," she would say, "there you will find a stone wrapped up in a paper; hold it in your left hand, make eight passes with it from my breast to my eyes, then four passes sidewise from my eyes to the temples, and I shall awake." This was done, and the sleeper, called back to normal consciousness by the soretic influence of these passes, opened her eyes and often was astonished at the position in which she might find herself.

§ 162. Miss Atzmannsdorfer and her linen.—Miss Atzmannsdorfer had ordered some linen garments to be made for her own use, and they were brought to the house at a time when she was somnambulic and holding a lively conversation with me. I had the sewing given to her. She expressed much joy at its receipt, but had scarcely looked through it before she said "I must be awake to examine these things; wake me up; do wake me." I did so immediately by means of upward passes and then it was necessary that she should be told over again that the seamstress had come with sewing; for she had not the remotest recollection of what had happened while she was somnambulic. It was therefore for the purpose of being able to see her work more clearly that she had anxiously desired to be awakened. She was perfectly conscious that she was asleep, and she knew from experience that her sensuous perception of her linen would not be so distinct and accurate in that condition, as in the

normal waking state. It is scarcely possible that a case should occur more significant of the spiritual condition of somnambulism. I have wakened Miss Kruger and Miss Blahusch several times in one day at their request. Mrs. Lederer would say "It is now time for me to go home; I must now be awakened," and as she said so it was done. Her consciousness had continued clear and kept measure of the time. On one of these occasions Mrs. Lederer wished to show what various conditions her somnambulism would offer, and she would pass from one to another in the course of awakening. In fact I saw her then while receiving twenty-five upward passes from her physician, pass through four clearly distinct conditions. But very clear consciousness, and definite knowledge of her disease were necessary to enable her to point out to me the various stages of its development as if it were the rolling of machinery. At another time, without any previous conversation in regard to the matter, I wished to try whether I could awaken Mrs. Lederer by placing myself silently behind her chair. Our like sides were thus brought opposite to each other, and from this I expected she would be awakened. But she perceived my purpose and would not permit me to stay there, saying it would wake her up. She was thus clearly conscious of what I was doing, and what influence I would have upon her, and drew her inferences there from. Miss Kynast also demanded to be waked up by me in the dark chamber. Miss Atzmannsdorfer, when somnambulic, instructed my daughter Ottone in the art of awakening her in my absence; she should make passes over her eyes and temples as is customary. It often happened that Miss Atzmanns-

dorfer announced to me the near approach of her spontaneous wakening. She was minutely conscious of the course of events within herself, as they ripened at the ending of somnambulism. She would say : "I will soon awake ; I feel it already in my stomach ; now it is on my breast ; now it is on my neck, and when it comes into my head I shall be awake ;" and after the lapse of half a minute she really did wake up. Miss Zinkel often requested me to wake her up, but sometimes, when I wished to do so, she would declare it premature and hurtful, request me to abstain, and bid me to wait quietly until she should wake up spontaneously. This same lady, who of late has had only short attacks of sleepwaking, has minutely described to me her sensations in waking from weak somnambulism. A few double passes, given her at her own request, brought her to a dim consciousness, a kind of halfway position between sleep and waking, as described in Chapter First. Every succeeding pass increased the clearness of her consciousness, and finally she became fully awake, with open eyes ; but even then, for about half a minute, her head is giddy. I have often observed this giddiness, not only in Miss Zinkel, but also in Miss Krueger, who never noticed me immediately, on awakening, but always rubbed her eyes for a long time ; looked with an air of discontent upon the dark, dim world ; and came to herself only by degrees. Mrs. Lederer, Misses Reichel, Atzmannsdorfer, Beyer, and others acted in the same manner after awaking from somnambulism.

§ 163. The clear consciousness of somnambulism.—
All these examples and observations show that persons

in somnambulism may have a high spiritual clearness and as complete a consciousness of their condition as when normally awake ; and they further bring to light the new psychological fact that in somnambulism there is a kind of education, as in the mental development from childhood to manhood. A neophyte somnambulist does not understand his relations to himself and the world, as we saw in the case of Miss Zinkel, who was confused about herself; she was a somnambulic child, but after the condition has often returned, these ideas having often recurred, having strengthened themselves by union with other like ideas, and having gained room in the soul and height in consciousness, they continue to grow clearer, abstract conceptions are formed, the reason forms judgments and draws conclusions, and the somnambulist is no longer a dreamer, but a thoughtful man in the state of sleep.

Sleep therefore, as a physiological change of our general life, does not prevent the full use of our thinking powers, as the old psychology ventured to assert.

§ 164. Somnambulism differs from common sleep only in profoundness.—The question now presses itself upon us, why it is not the same in common normal sleep. The investigation has not yet advanced far enough to answer this question. But this much seems probable, that the cause is to be found in the inferior depth of common sleep. When the senses or the imagination are strongly influenced by external irritants or lively conceptions we awake from common sleep ; and for this reason, none of our conceptions can reach such an exaltation or strength as would suffice to induce us to act. In somnambulic sleep, on the contrary,

the strongest external irritations, cuts, burns, and noises, do not suffice to awaken the sleeper ; he is so deep that the liveliest thoughts do not interrupt him ; lively mental excitements can therefore arise ; he can sustain them, and their strength may induce him to speak and act without breaking his sleep. Somnambulism, therefore, appears, in its physiological as well as its psychical aspects, only as a deeper kind of sleep, and from this greater depth all the somnambulic phenomena hitherto observed may be sufficiently explained.

§ 165. **Thouing.**—When I repeated to Miss Beyer in her normal state the words which she had spoken to me the previous day in somnambulism, and she heard that she had thoued me, she blushed. At the time of our first acquaintance she was almost entirely ignorant of her condition in sleep-waking, and she was not aware that she addressed everybody as thou. But all somnambulists with few exceptions do this. Lady Baroness von Seckendorf said to me immediately when I had made a pass over her right hand with a like crystal pole, "thou hast lamed my arm." Mr. Krebs, Mrs. Kienesberger, Misses Weigand, Sturmann, Nowotny, Kynast, Kruger, Dorfer, Reichel, Zinkel, Atzmannsdorfer and Blahusch, and Friedrich Weidlich said "thou" to everybody when sleeping. Miss Girtler did the same, making a formal apology for it. Mrs. Lederer was the only distinct exception : she said : "you" [*Sie* in German] to her physician and myself. But her physician told me that sometimes previously when he attended her, she had thoued him. The "you" which she used was therefore the result of a spiritual education in somnambulism after long expe-

rience : when I first saw her, she had outgrown somnambulic childhood wherein everybody is thoued, and had developed herself to the conventional language of "you." Miss Winter had at times peculiar conditions of somnambulism in which she would address other persons with "you." But Mrs. Joanna Anschuetz in the same conditions always said "thou" to me.

The thouing in sleep-waking belongs in the classes of all those phenomena, in consequence of which the somnambulists, like the sensitives generally, in their whole physiological bearing, stand some steps closer to nature than non-sensitives, or rather are not so far removed from it. This close relationship to nature again coincides with the depth of somnambulic sleep, in which the sensitives are farther removed from ordinary life than ever occurs in other circumstances.

CHAPTER XVI.

STATE OF THE MEMORY IN SOMNAMBULISM.

§ 166. **Recollection of occurrences during sleep-waking.**—Max Krueger, Misses Kynast, Reichel, Blahusch, Nowotny, Beyer, Atzmannsdorfer, and Zinkel, Mrs. Lederer, Mrs. Krebs, Friedrich Weidlich and many others, after awaking, had not the slightest recollection of anything that occurred to them during somnambulic sleep. When they awoke while engaged in speaking or acting, they had not the slightest idea from memory of what they had just been saying or doing. This is the rule with all somnambulists, and hence the common belief that no one preserves any recollection in his normal condition, of his ideas and doings in sleepwaking.

But on close examination I have not found this to be universally true. Mrs. Kienesberger told me on one occasion that a short time previously, when somnambulic, a number of people had stood about her and had spoken to her about many things ; she awoke and was astonished to find so large a company about her. She then told them the dream which she had had, and this supposed dream was nothing more than the dim recollection of the events which had just been really occurring in the room. I observed something similar in Miss Krueger. While she was recovering from the drowsiness of the sleep, she said it appeared to her as

though she had been in the garden among the flowers. I questioned her and she told me she had a dream, the particulars of which as she stated them, were a mere repetition of our conversations while she was somnambulic. Immediately after waking from somnambulism Miss Zinkel told me a dream she had had ; it was nothing more than the conversation I had just had with her. But at the end of a quarter of an hour, when I wished to speak about it again, she had forgotten it entirely ; she no longer remembered a word of her dream. These last cases are precisely like those which happened to non-sensitives wakened in the midst of normal sleep ; immediately after awaking we remember the last fleeting dream-pictures, but at the end of a few minutes they have entirely escaped. The recollection of the ideas excited in the dream are strong enough to be sometimes remembered when awake, but they are not strong enough to get a firm hold on the mind and they are soon forgotten, like many other events occurring to us while awake but not observed attentively. On the other hand I noticed in my long intercourse with Miss Atzmannsdorfer that though she never remembered immediately after waking, what had passed in somnambulism, yet afterwards a dream-like recollection would arise when similar events occurred to develop the association in her mind. If I showed her when awake a scientific instrument, which I used in experimenting with her in somnambulism, she would say it appeared to her as though she had seen that instrument before, Mrs. Lederer would speak still more distinctly in such cases. She had often observed that though on awaking she knew nothing that had passed in somnambulism.

bulism, yet afterwards a partial recollection of the events would arise in her mind.

§ 167. Different states of Miss Girtler's memory.—

The somnambulic sleeps of Miss Girtler are peculiar. They are irregular in duration, and after waking, two conditions are perceptible: one in which she remembers nothing that happened while she was asleep; the other in which she remembers everything as though she had been normally awake. The first condition is evidently that of most somnambulists; the last she considers to be a still higher spiritual state. I regret that I have not had an opportunity to study the interesting difference more thoroughly, and must content myself now with merely recording the fact here, so that it might not be lost for future investigation in consequence of its rarity.

§ 168. Memory better in somnambulism than in normal consciousness.—The consideration of the state of the memory during sleepwaking itself, is a point of much psychological interest. Every somnambulist recollects all the records of his memory as clearly as if he were awake, yes, he recollects them much more clearly than when awake. What he once knew and had forgotten he remembers in somnambulism. It is known that somnambulists speak tongues which they do not understand when awake and if a close investigation be made for the source of their knowledge, it will be found that they knew these tongues in early years, but had forgotten them in the course of time for the want of practice, and it was supposed that nothing remained of them in the memory. But the

traces of these languages, though lost to the normal memory, still remained in the mind, and somnambulism was powerful enough to raise them again to clear consciousness, to give them for a short time their lost freshness, to fill them with a new glow. From this it seems probable that the somnambulic sleep has a better memory than normal waking. But we find something just like this in common normal dreaming ; for instance, I cannot call back clearly to my memory the features of my deceased wife, who died about twenty years ago, no matter how much I strive to do so. But when I think of her in dreams her picture reappears before me, and I perceive it so distinctly that all the expressions of her fine features are visible to me in all their loveliness. My memory, therefore, is sharper and stronger in dream than in waking, and therefore this quality belongs not to somnambulic dreaming alone, but to all dreaming. It rests, as is known, upon nothing else than the absence of all influences that might disturb the memory by the numerous sensuous impressions filling our minds constantly in ordinary life, and preventing us from going down to the depths of our consciousness. The exclusion of these impressions gives other ideas more force to the sleepwaker and to the ordinary dreamer, and hence their more acute memory.

§ 169. The ideas of one somnambulic fit followed up in the next.—Another remarkable quality of somnambulism is, that the sleepwaker, though he has little or no recollection in his normal state of what he thought, did, and perceived when somnambulic, yet has not forgotten ; for all somnambulists have a clear

recollection, while in their abnormal condition, of all that they ever did, or mentally perceived in that state ; and, in one fit they follow up the labors and trains of ideas broken off by the end of the previous fit. Miss Nowotny found in her writing desk a knit purse not quite finished, but so far done that she must have spent several nights working at it. When normally awake she knew nothing at all about the origin of the purse, save by inference ; she found it lying in her locked writing-desk, after she had been bed-ridden for some time with illness ; she must have worked at it regularly night after night in somnambulism with a definite plan. When I spoke with Misses Reichel, Atzmannsdorfer, and Kynast, in somnambulism, they always knew exactly what they had done in previous fits of sleep-waking, what experiments had been made, and who had taken part in them. Miss Zinkel, when somnambulic, had warned me of dangers threatening my life, to be plotted by my enemies in 1853, and every time she was somnambulic she came back upon these dangers with great earnestness, and always referred to what she had said on previous occasions. I often observed in Misses Beyer and Sturmann also, that when they became somnambulic, they took up the thread of thought broken by waking from the previous sleep. Since, persons in somnambulism remember at the same time, all they have done in the normal condition, therefore, they possess a richer memory than when awake.

But here, too, sleepwaking shows an analogy with ordinary sleep, for it is well known that there are many men who spin out their dreams from night to night and yet know nothing of them when awake.

§ 170. Main facts about somnambulic memory.—

We have now arrived at the following results :

1. *The sleepwaker recollects everything which occurred to him while awake, as well as in previous fits of somnambulism.*

2. *The memory is sharpened and exalted during sleepwaking, so that knowledge, once possessed, but forgotten when awake, such as language, is recollected.*

3. *After awaking, all this recollection is ordinarily lost again, and even the events occurring during the somnambulic fit, are forgotten. Sometimes there is a faint recollection for a few minutes after awaking ; sometimes, also, a dim impression remains in the mind for a long time.*

4. *Somnambulism is not always the same, but contains many different and not yet investigated conditions, one of which, rarely occurring, leaves a full recollection in the mind after waking, of all that happened while the abnormal sleep lasted.*

5. *Somnambulism and ordinary sleep have some peculiar qualities in common, namely, that after waking, faint, swiftly disappearing recollections of dreamings remain ; that in those conditions the mind remembers impressions partly or entirely forgotten when awake, and that the sleeper remembers trains of thought commenced in previous dreams, and continues to follow them up, though he knows nothing of them when awake.*

6. *Somnambulism is a true sleep, but deeper than ordinary sleep. Its greater depth furnishes the explanation for most of its peculiarities, which explanation is simple, clear and consistent with established principles of psychology.*

§ 171. Uprightness and vanity.—Somnambulists are extremely sensitive to distrust of their honesty and doubt of the truth of their statements. When persons show that they are suspicious that the sleep-waker is trying to deceive them, there is usually an end to experiments. The somnambulist hates those who thus offend him, will have nothing more to do with them, and is unwilling to work with them. The somnambulic peculiarities of Miss Girtler brought a number of inquisitive friends to see her. When she learned that some of them suspected her conduct of being deceitful, she absolutely refused to admit any more visitors ; her father had to close the door against every one, and her physician with difficulty obtained permission for me to see her. I have known many similar examples. On the other side I have always found them as sensitive to the least dishonesty practiced upon them by other persons. An active, easily offended sense for honesty and morality, more exalted than that ordinarily found in the world, always governs them. We have seen that Miss Zinkel, in somnambulism, disapproved so much of an insignificant violation of uprightness in her normal state, that she complained to me of herself. But if we should conclude from this that the somnambulists are all thus, and that none have been ruined by fate, we should commit an error on the other side. I have indeed known some somnambulists who did not hesitate to openly say what they knew to be false ; but I have not mentioned their names in this treatise, and I have generally avoided them. They, however, were false only when dishonest physicians led them on to fortunetelling and to medical quackery, when they had to

avail themselves of the stupidity of others who were to be used as tools or dupes.

Women do not give up their innocent little vanities in somnambulism. Miss Atzmannsdorfer knew that I disliked all nightcaps. Scarcely had she learned my taste in this matter when I observed, that if I surprised her lying ill and somnambulic in bed her first act was always to tear off her nightcap hurriedly, and hide it before me under the bed so that I should not see her in it. Miss Girtler, in sleepwaking, was always careful to keep her long and beautiful hair in good order. On one occasion this same lady, while somnambulic, spoke with much interest of the ceremonies of the approaching Corpus Christi day, which she wished to attend and she was full of curiosity about the new and beautiful bonnet she was to receive that day from the mantua-maker. The conduct of Lady Baroness von Seckendorf was more studied in sleepwaking than when normally awake. Misses Beyer, Weigand, Reichel and Sturmann all spoke purer German in somnambulism ; and Miss Weigand spoke with studied pathos. This other little things showed the natural womanly desire, in somnambulism, to please.

Vanity is always a little liar ; it leads us to claim merits to which we are only half entitled. But while it gives us a new evidence of the clearness of consciousness in sleepwaking, it also shows us that somnambulism, although doing homage to a higher uprightness on one side, is not entirely free, on the other, from the weaknesses of selfishness and untruth.

CHAPTER XVII.

THE NATURE OF SOMNAMBULISM.

§ 172. **Co-existent negative and positive od.**—We have seen (in chapter III) that somnambulism is an od-negative, and cramp an od-positive condition. We then drew the conclusion that two states so diametrically opposite to each other, could co-exist simultaneously in our organism only by virtue of the fact, that the positive and negative forms of od may meet without destroying or neutralizing each other. That this actually is the case, I have clearly shown in many places. And that this may and often is the case in the human body, is abundantly shown by the somnambulic phenomena which I have recorded one after another.

Common sleep begins by the abandonment of all mental activity, with a quiet forgetting of everything that occupied the attention and activity of the mind through the day. The spiritual animal life ceases, and its place is occupied by the unconscious negative. The forward part of the brain sinks into rest. If the mind is filled with care, anxiety, misery, sorrow, anger, love, or any mental activity, sleep is driven away ; the irritated cerebrum refuses to go to rest ; the spiritual activity will not give place to the vegetative, and

sleep is impossible. This often happens among non-sensitives, and we must expect to find it much oftener among the more susceptible and irritable sensitives.

Even in ordinary sleep the sensuous perception is benumbed ; sight is gone entirely ; the hearing is dull, slight irritations of the senses are not noticed. Many people sleep so firmly that they must be well shaken before they will awake. In somnambulism the senses are still more benumbed. Sleepwalkers may be pinched, cut, beaten with rods, (of which I have given many examples from my own experience) burned, their limbs may be amputated, even their breasts cut off and they will not awake. It follows that somnambulism is a firmer, deeper sleep than the deepest ordinary sleep. The higher the sensitiveness of the sleepwaker is, the more difficult, even to impossibility, is it to awaken him by sensuous irritations. High sensitives sleep so very deeply, particularly when passes have been made over them in sleep, that as Misses Reichel, Zinkel, and Krueger said, it was impossible to wake them through the senses.

§ 173. Soretic influences treasured up in the nematic state.—But we know how to awaken somnambulists easily—namely, by soretic treatment with upward passes towards the nervous centre. They awake readily when the sensitiveness is low ; even a single pass may suffice. It is different with demi-and high-sensitives. Repeated passes may fail to awaken them, especially if they have not slept long. Miss Reichel required from eight to fifteen passes to awaken her. I had often to give Miss Beyer from twelve to sixteen passes before she awoke. Miss Atzmannsдорfer never

awoke until she had fifteen or twenty passes. I saw Miss Lederer receive about thirty passes before waking. It follows that the influence of all these upward passes given before waking, was preserved in the brain, although the person was not yet awake. While, therefore, the somnambulist's condition, on one side, under certain negative influences, was nematic, her condition, on the other side, derived from the passes, was soretic, both existing together in full somnambulism. We therefore discover here the important fact that, in a sensitive and somnambulic person, both conditions can exist together—that which creates somnambulism and that which induces cramp, the nematic and soretic, the od-negative and the od-positive.

§ 174. Why sleepwalkers clamber out on roofs.—
This furnishes us, then, with a key to the explanation of the most complex phenomena of somnambulism. I shall refer to a few of them. A sensitive person often became somnambulic, but remained in her bed. Suddenly it was observed that she arose, went out of the window, and took dangerous walks on the cornice of the house. This was Miss Sturmann, in Ferdinand-street, Vienna. So with Lady Baronesse von Natorp ; she remained constantly in her chamber, but unexpectedly her night gown was found in the hall. The members of the Rainer family were uneasy every night at certain hours. What kind of times were these for all these sensitives ? It was when the full moon and its od-positive rays influenced them and made them active. While they were in a predominating od-negative condition, the moonshine had an od-positive effect upon the whole house and its occupants. The influencee

upon the somnambulists was not strong enough to disturb them. Affected by the light fine od-positive influences, their brains were excited to activity. They arose from their beds, and since their condition was mainly od-negative, and the moon's rays od-positive, the sensation was agreeable, and hence the untameable longing of somnambulists to get into the full glare of the moonshine; hence also the singular clambering upon roofs, which has no other purpose than to get where the moon's rays will strike the sleeper without obstruction, and where the light can also be seen on surrounding objects. Miss Sturmann when somnambulic, said to Professor Lippich, with a kind of delight, that moonshine was an enjoyment, too deep to be described by any words. We laughed at the singular earnestness of the sleeper, because we did not then (July 1844) understand the meaning of her expressions; but their profound meaning is now as intelligible for all.

§ 175. Weak soretic irritations causing activity.—
Weak od-positive or soretic irritations excite the sensitives, as I have shown. When Misses Blahusch, Atzmannsdorfer, Rupp, and others began to get drowsy in my dark chamber, a single upward pass sufficed to drive away their somnolency. But if I gave them more passes than were necessary to keep them awake, I created a feeling of uneasiness, headache, stomach-ache, uncomfortable warmth, and finally cramps. Similar sensations are made when upward passes are made over a somnambulic sensitive, as when he is exposed to any od-positive influences. In simple somnambulism he sleeps quietly; but when weak or

moderate od-positive and soretic influences affect him, they do not wake him up ; his sleep is so deep that as sensuous irritations will not awaken him, so neither will slight odic irritations. He sleeps, but not soundly. As a healthy man with an overladen stomach sleeps, though in a restless manner, so a sensitive in somnambulism continues to sleep, but uneasily when moderate soretic influences are at work on him. He begins to speak, arises from his bed, walks about, and now becomes a sleepwaker. This restlessness may be induced by causes apparently the most insignificant, such as lying with the head to the west ; the proximity of a wall to the back of a sleeper lying on his right side ; the proximity of a stove ; a persistent southwest wind ; the light of the full moon ; a dog or cat lying near the feet ; a large looking glass ; a piano, and a thousand other little circumstances of which nobody thinks in ordinary life. They excite the od-negative somnambulist positively, and incite him to activity without breaking his deep sleep. Mental excitements operate in the same manner. A somnambulist while asleep creates ideas ; if his mind fixes itself on care, anxiety, danger, desires, or passions, the corresponding thoughts arise in his mind and exercise an od-positive influence on his brain, as I have hitherto explained. Every mental agitation arising in the brain operates upon it like an upward pass ; it does not wake him up, but impels him to action, which then takes place if the sleep be not broken. The somnambulists work, talk, laugh, weep, write love-letters and poems, send for physicians, walk out on roofs, go out barefoot into the snow ; their external senses are totally without feeling ; sleep holds them captive ;

the spiritual activity has received their impressions and occupied their place.

§ 176. **Conclusion.**—We now come to the following conclusion :—

Somnambulism may be separated into two formal, different but coexistent, and combined conditions. It is not a simple affection ; it is not an independent disease, to which an immediate curative treatment can be applied ; but it is a complicated abnormal phenomenon ; its deepest foundation is sensitiveness, without which there can be no sleepwaking. It is, therefore, born with the possessor, and is awakened and exalted by various accidental psychical and moral disturbances of health. In its proper nature, it is od-negative combined more or less with od-positive soretic external or internal influences ; it is a mixed od-negative and od-positive condition of the nervous system.





TRANSLATOR'S APPENDIX.





TRANSLATOR'S APPENDIX.

THE following extracts from various authors, confirmatory of Reichenbach's statements and theory may be not uninteresting to the reader :—

“ However astonishing, it is now proved beyond all rational doubt that in certain abnormal states of the nervous organism, perceptions are possible through other than the ordinary channels of sense.”—*Sir William Hamilton.*

“ The most cautious philosopher has no right absolutely to reject facts thus attested, because he cannot see their explanation; and above all, he has no right to brand the witness with the charge of deceit or imposture, without full and careful inquiry. If he will not or cannot investigate, let him, in decency, be silent.”—*Prof. Wm. Gregory—Letters on Mesmerism—Let. XIII, p. 14.*

“ It is a very obvious principle, although often forgotten in the pride of prejudice and of controversy, that what has been seen by one pair of human eyes is of force to counter-vail all that has been reasoned or guessed at by a thousand human understandings.”—*Thos. Chalmers.*

“ We stand before the dawning of a new day for science, —a new discovery, surpassing any that has hitherto been made, which promises to afford us a key to some of the most recondite secrets of nature, and thus to open up to our view a new world.”—*Hufeland.*

“ Unalarmed by the apparent strangeness and incongruity of the phenomena to be investigated, we should call to mind how frequently appearances of external nature, puzzling at first sight and seemingly irreconcilable with each other, have

all been solved and harmonized by a reference to some one pervading principle, and should thus be led to surmise that the irregularity and variations of the Mesmeric world may be found, upon mature observation, less inexplicable than a careless spectator could imagine."—*Rev. C. H. Townshend.*

"In every case the boldness and acuteness which lead a man to take new views of a subject and to combat ancient prejudices are in his favor. There is an innate consciousness attendant on correct observation, which upholds him and encourages him to war with the world. The sudden light that has struck him is like a light from heaven, and brings conviction to his heart. His eyes are not deluded but sharpened by desire. No other person can have that intimate zeal, that interest in the inquiry which urges him onward. His all is at stake, and consequently no one is so strict with him as he is with himself. Who can compare the cursory and partial views of the great body of mankind with his? We may call him a visionary or a heretic, but remembering the slow but certain triumph of Harvey and Galileo, we should be cautious how we brand him with epithets which may recoil upon ourselves."—*Townshend, Book I, sec. 2.*

"When we know that there is a medium permeating in one or other of its forms, all substances whatever, and that this medium is eminently capable of exciting sensations of light, when we take this in conjunction with a heightened sensibility in the percipient person, rendering him aware of impulses whereof we are not cognizant, we are no longer inclined to deny a fact or suppose a miracle."—*Ib. III. 4.*

"'Is not vision,' as Newton says, 'performed chiefly through the vibrations of this medium, excited in the bottom of the eye by the rays of light, and propagated through solid, pellucid and uniform capillamenta of the optic nerves into the place of sensation. And is not hearing performed by the vibrations of this or of some other medium, excited in the auditory nerves by the tremors of the air, and propagated

through the solid pellucid and uniform capillamenta of those nerves into the place of sensation? And so of the other senses.' Admit this, and the mysteries of sensation in sleep-waking stand revealed. When once we see clearly (and see we must, if we consider nature aright,) that the communication between all portions of the univers is continuons and incapable of interruption—that there is a pervading medium filling all things, permeating all—the extended sphere of mesmeric faculties appears no longer miraculous."—*Ib. III, 4.*

"Productive of the effects called mesmeric, there is an action of matter as distinct as that of light, heat or electricity, or any other of the 'imponderable agents,' as they are called."—*Ib. IV.*

"It seems to me there is every reason to believe that the principle of mesmeric action is a disturbance of equilibrium, and that the mechanical effects may be explained by differences of positive and negative, of plan and minds, in the mesmerizer and the patient."—*Ib. IV.*

"E. A." one of Townshend's mesmeric subjects, who perceived things by the forehead, would occasionally receive information relative to external objects by the back of his head, the side or the top; but he seldom did this spontaneously, and would always say it was a great effort and did him harm.—*Ib. III, 3.*

"Anna M." was very sensitive to any touch on her forehead, though apparently dead to feeling elsewhere.—*Ib.*

"Ammonia at her nose had no effect, but placed to her forehead made her draw back with affected respiration, and moreover exhibit action in the muscles of the nose, which last circumstance more especially adds to the presumption that the external impaet, in all mesmeric cases, though beginning at an unusual point, is finally transferred to the accustomed nerves of sensation."—*Ib.*

A lady told C. H. T. that when her daughter was in a cataleptic fit she could hear only at the pit of her stomach;

and once when her daughter standing in the middle of a morning bath was taken with a fit, the mother called to her in vain, till she held her mouth close to the water and called, when she was roused from her catalepsy, as she usually was when she was called so that she could hear.—*Ib.*

“E. A.” with his eyes shut was able to read the smallest type.—*Ib.*

“E. A.” played a piece of music which he had never seen before, from a book placed at some feet from him.

Once when mesmerized and led to a place where he had never been, he described its features properly and the form and position of the distant mountains.

His power of vision or perceiving objects which we perceive only by vision, was strongest in his forehead, but appeared to reside in all parts of his head.

When a set of colored eye-glasses were given to him, he raised a blue one to his forehead and said, “everything looks blue to me,” and he named the tints of the other glasses. The eminent Dr. Foissac, of Paris, was witness on this occasion.

E. A. had two thick towels over his head and reaching to his hips, and still was able to read, holding the book opposite his forehead. These towels impeded his power of vision somewhat but he could still read.

He could tell a card hidden behind a book.

Sometimes I placed a card in a book with his finger in, holding the book slightly open where the card was ; E. A. told the card. If the book were closed he could not tell it.

Sometimes he said he could see through the book; sometimes he said that he saw by vibrations of a medium which could turn corners. Sometimes when he found it difficult to tell a card he would ask to breath on it.

I was inclined to imagine that the whole nervous system of E. A. shared something of the percipient faculty manifested more particularly in his head.

E. A. could read in perfect darkness after some practice ; at first it was difficult. He liked to have hold of one of C. H. T's hands or to have it on his forehead. He would also beg him to breath on the thing to be seen.—*Ib.*

“The concentration of mind in mesmerism is such as I should imagine to be unattainable under any other condition: all the bodily organs being, as it were, annulled, there are none of those conflicting consciousnesses, which in actual life destroy each other, like meeting waves in water. Whatever source of perception mesmerized persons possess, appears rather to consist in one sense than in many; in one sense which can become each the others, so that he who exercises it seems to become by turns, a hearing, seeing, or feeling unity.”—*Ib.*

E. A., when his eyes shut, in natural somnambulism, would play pieces of music on his flute from the book, turning the pages over at the proper places, and he would do this in the dark—the music being pieces that he was unable to play in his waking state without using the notes.—*Ib. II, 3.*

Anna M. could hear a watch tick at her forehead, or at her stomach, or at T.'s ear; but not at her own ear.—*Ib.*

“It has appeared to me that the mesmerized possess similar perceptions of sound apart from the natural sense of hearing, and that they require certain conductors, in order to make them apprehend a regular series of aërial vibrations. Be it remarked, however, that the degrees of this isolation from sounds, considered as sounds, depends on the intensity of their mesmeric sleep ; for it should ever be kept in mind that mesmeric sleep-waking has its shades and gradations, varying from consciousness fully retained to its faintest twilight, or utter extinction.”—*Ib. II, 3.*

“The nerves of sensation in mesmeric patients are of themselves quite estranged from their usual modes of action; and

if the patient experiences sensation, it must be by some other than the usual modes of nervous action."—*Ib.*

Anna M. said: "In the mesmeric state I have only one mode of knowing things; and whether I see them, smell them or feel them, it is all the same.—*Ib.* 3.

The Seeress of Prevorst said, "I can find whatever I will upon my plate with the spoon; I know well where it is; but I cannot tell whether I see or feel it; and so with regard to all other objects; I know not whether I see or feel them."

"In the little I have seen, I have yet seen a patient walk about with her eyes shut, and well blinded besides, holding the knuckles of one hand before her as a seeing lantern."—

Dr. Herman Mayo.

Dr. Mayo states that, "at his suggestion," he does not say whether in his presence, presented cards to the *new* visual organ of a young lady in a trance, not looking at the cards himself, or knowing what they were till afterwards, and she told them correctly.

Dr. Mayo relates, on the authority of a Mr. J. W. Williamson, of Wickham, several cases of persons entranced, who could see with the back of the head and with the fingers.

Dr. Delpit, inspecting physician of the waters at Bareges, states that a young lady of thirteen, was subject to being entranced, and in that state could not see with her eyes, but could read by placing her fingers on the letters.

Baron de Fortis records the case of a somnambulist servant-girl who waited at the table at Aix with her eyes shut, and saw with her fingers, the palm of her hand and her elbow.

Dr. Mayo says that, in 1838, he saw in the possession of Mr. Bultell, letters from an eminent provincial physician of England, describing a person who was sometimes entranced, and then her senses were not in the proper organs, but the bit of the stomach, who could see objects at a distance, through walls and houses, could read the thoughts of others

far or near, could foresee future events, could see her own inside illuminated, and could tell what was wrong in the health of others. Mr. Bultell examined this patient and bore testimony to the wonderful character of her powers.

Dr. Petetin an eminent civil and military physician of Lyons, in a memoir on catalepsy published about 1790, records the case of a young married woman who fell into a trance, and in that case could not hear at her ear, but heard at the pit of the stomach, saw all through her body as if it were transparent, without being told said that Petetin had a headache and foretold truly its course and termination, and discovered and read a letter which he had in his pocket.

Dr. Petetin also records the case of a young lady of Lyons who, while in a trance, brought on by the firing of cannon, saw him fighting to drive away the revolutionary tyrants, and foretold the sad events of the 29th Sept., 7th and 8th of October, 1790, and the cruel proscriptions issued by the committee of Public Safety.

Dr. Petetin and Dr. Prost record the case of Madame de Saint Paul, who was entranced and in that position saw things passing at the distance of quarter of a mile (through interposing walls and houses) and read the thoughts of persons about her.

"Dr. Haddock's clairvoyant subject in the magnetic sleep, as I [Dr. Gregory] saw more than once, could see perfectly what passed behind her, her eyes being closed; or anything placed in such a position that had her eyes been open, she could not have seen it: she could also see very often all that passed outside of the door, and when I was there told us how many servants of the hotel were listening at the door in hopes of hearing wonders. She would also tell what was doing in the room above or below her. In short she frequently exhibited clairvoyance in every form, not only in those just mentioned but also in that of seeing prints and pictures shut up in boxes. Besides seeing various instances

of direct clairvoyance, I was able to satisfy myself that Dr. Haddock's experiments were made with the greatest care, and judgment: that he was particularly well acquainted with the various causes of error and confusion, very careful to avoid them, and that in short his accounts of such experiments as I had not seen were entirely trustworthy."—*Professor Wm. Gregory—Part II.—Case 44.*

Mrs. Anna Cora Mowatt (now Ritchie) was mesmerized during illness. While mesmerized she was a clairvoyant. She says:

"I was annoyed at being told that I had spoken, done, or written things of which I had no recollection. Numerous poems were placed in my hands, which, I was informed, I had improvised as rapidly as they could be taken down, the subjects having been given haphazard, by any person present. It was no particular gratification to be assured that I had never produced anything as good before. Nor was it any consolation to be told that in sleep-waking I was far more sensible, more interesting and more amiable than in my ordinary state."

Her religious doctrines in the mesmeric state were those of Swedenborg.

She could tell what her mesmerizer was eating. She could read, write and work in the dark. She recognized objects hidden in a handkerchief and held to her forehead.

She predicted correctly a severe illness which was to come upon her after some days, and prescribed the treatment. The attack was a congestion of the brain.—*Mrs. Mowatt's Autobiography, Ch. IX.*

Isabella D.—, when mesmerized, could hear words whispered on the further end of a string fifteen yards long, one end of which she held in her hand.—*Lang on Mesmerism, Ch. V.*

The Chevalier Filippi, of Milan, doctor of medicine, and a most determined opponent of mesmerism, has acknowledged

to me that some of his patients, more particularly women under their confinement, when suffering from nervous excitement have distinguished the smallest objects in darkness which appeared to him complete.—*Townshend III, 3.*

Barth had a patient, E. S., a young girl, who could see her whole body and its organs as if transparent or highly translucent.—*See Barth's Mesmerist's Manual, Chapter on Prevision.*

“The sleep-walker sees colors in the dark, and that fact is proof that the efficient cause of vision is the vibration of another medium than light, and is not dependent on the anterior mechanism of the eye.”—*C. H. T.*

A young man who was thrown into mesmeric sleep in three minutes on the first attempt, describes his feelings thus: “The moment you pointed your fingers at me I felt uncomfortable. I dared not meet your gaze; a sensation of heat, resembling a stream of electricity, commenced at my forehead and followed the course of your hands down to the pit of my stomach. I could not open my eyes. I knew I was sitting on a chair before you, and the last idea in my mind before falling fast asleep was this—Shall I ever be allowed to rise again.”—*Esdaile's, Note to Chap. VII.*

When a magnet was held towards Anna M. she exhibited convulsive movements in her hands. When questioned in regard to her sensations she replied, “I feel as if I were beginning to be mesmerized, but not pleasantly: I feel cold.”—*Townshend II, 3.*

“The effects which precious stones produce upon sleep-walkers are also curious. In three cases where I had the opportunity of making experiments of the kind, I found a certain correspondence of sensation.”—*Townshend:*

“E. A.” asserted that when mesmerized a vapor proceeded from the magnetizer and seemed to penetrate and pervade his frame.—*Townshend.*

“It seems to me that irregularity in the distribution of

the nervous energy is at the bottom of all the mesmeric symptoms, however produced, whether naturally or artificially; and I suspect the same effects may follow a state of exhaustion or repletion of the nervous system. If I might venture on so material an illustration, I should say that the first effects produced in the system by mesmerism, may be likened to a river rolled back upon its source by a heavier body of water, stagnating in its channel and unable to resume its natural course till the opposing tide subsides.

From all I have seen, I cannot but believe that there is an influence of some kind that passes from one person to another, when one of two persons is mesmerized in the way I have described ; that in fact there is a virtual transfusion of some vital agent from the one body into the other."—*Dr. Esdaile.*

"That [in the mesmeric trance] the nervous sensibility has retreated from the surface and the organs of sense, is evident to all observers, by the universal insensibility; and the condition of the brain and muscular system would seem to indicate that they labor under the effects of this revulsion. The means, used to demesmerize particular organs and the brain itself, appear to act by determining the nervous currents back to the surface, thereby relieving the deeper organs from the load that oppressed them."—*Ib.*

"That the mesmeric torpor of the nerves and brain does not arise from sanguine congestion is often strikingly and beautifully illustrated by the actions of persons suddenly awoke from the trance. They open their eyes wide, and at the same moment their faculties are restored, but it is seen that the pupil is dilated and insensible to light. This they also immediately become aware of; they know that their eyes are open, and that they ought to see, but do not. The thought fills them with horror, and with a fearful cry they bury their faces in their hands like persons struck by light-

ning; but this soon passes off, and the retina recovers its sensibility by a little rubbing of the eyes."—*Ib.*

I think the power of somnambulism to bring back to the memory, knowledge long lost to the normal consciousness, cannot be sufficiently accounted for by the mere relief of the mind from distracting sensuous impressions and conflicting thoughts. A similar supernormal acuteness of memory has been observed in insanity, delirium, high fever, in persons whose brains had been wounded, and in persons under the influence of hasheesh, chloroform, &c. Several gentlemen to whom very sudden and serious accidents have happened, have told me that at the instant when death seemed to be about to strike them, they saw every act of their lives. In all these cases I imagine that there must be a rush of blood to the brain, an increased mental activity. May it not be that every impression ever made in the mind is recorded on the fibres of the brain, and that those records not often used finally get dusty and almost obliterated, and that they can then only be read when illuminated by an extraordinary flow of blood?

J. S. H.





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